REPORT RESUMES

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THE EFFECTS OF GROUP COUNSELING ON SCHOOL ADJUSTMENT OF UNDER-ACHIEVING JUNIOR HIGH SCHOOL BOYS WHO DEMONSTRATE ACTING-OUT BEHAVIOR.

BY- COHN, BENJAMIN AND OTHERS
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THE APPLICATION OF GROUP COUNSELING WAS INVESTIGATED WITH RESPECT TO ITS EFFECT ON UNDERACHIEVING, ACTING-OUT, JUNIOR HIGH SCHOOL BOYS. IN ADDITION, TWO OTHER EFFECTS WERE STUDIED--(1) THAT OF INVOLVING TEACHERS IN DISCUSSION GROUPS AND (2) THAT OF THESE DISCUSSIONS GROUPS ON TEACHER ATTITUDES. THREE COUNSELORS FROM DIFFERENT SCHOOLS IN SIMILAR SOCIOECONOMIC AREAS PARTICIPATED. EACH CONDUCTED TWO EXPERIMENTAL COUNSELING GROUPS AND A TEACHER DISCUSSION GROUP. STUDENTS IN THE SEVENTH AND EIGHTH GRADES OF ALL THREE SCHOOLS WERE TESTED FOR PROJECT SELECTION. EVALUATIVE INSTRUMENTS WERE USED WITH THE SELECTED SAMPLE BEFORE AND AFTER COUNSELING DURING 1 ACADEMIC YEAR FOR PURPOSES OF PRE- AND POST-TESTING. FOLLOWUP TESTING WAS ACCOMPLISHED 1 YEAR AFTER COUNSELING TO DETERMINE WHAT CHANGES WERE MAINTAINED BY THE STUDENT POPULATION. ALL STUDENT AND TEACHER MEETINGS (25 AND 13, RESPECTIVELY) WERE TAPE RECORDED. (EVALUATIVE INSTRUMENTS USED WITH STUDENTS AND TEACHERS, AND HOW THEY WERE USED, ARE DESCRIBED IN THE REPORT TEXT.) AS A DIRECT RESULT OF COUNSELING, THE EXPERIMENTAL GROUPS IMPROVED IN SELF-CONCEPT, LEANED MORE TOWARD NONCONFORMING BEHAVIOR, FELT THEY HAD DIFFICULTY ACCEPTING THEIR PEERS, AND WERE POORLY MOTIVATED TOWARD ACADEMIC WORK WHEN COMPARED WITH CONTROL GROUPS. AFTER 1 YEAR THESE EXPERIMENTAL STUDENTS BECAME MORE DELINQUENCY-PRONE THAN THEIR COUNTERPARTS. THE EFFECTS OF TEACHER DISCUSSION GROUPS AND THE RESULTS OF A PARENT SURVEY WERE DISCUSSED ALSO. (JH)

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THE EFFECTS
OF GROUP COUNSELING ON SCHOOL ADJUSTMENT OF UNDER-ACHIEVING JUNIOR HIGH SCHOOL BOYS WHO DEMONSTRATE ACTING-OUT BEHAVIOR

COOPERATIVE RESEARCH PROJECT NO. D 040

BENJAMIN COHN, ED. D.
CHIEF INVESTIGATOR

Director: C. C. Dunsmoor, Ed. D.
Co-Investigators: Charles F. Combs, Ed. D.
Edward J. Gibian
A. Mead Sniffen, Ph. D.

BOARD OF COOPERATIVE EDUCATIONAL SERVICES
First Supervisory District, Westchester County
546 North Bedford Road, Bedford Hills, New York

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PREFACE

It would be impossible in this section to give full credit to all the people who have given their time and energies to this project. However, we would like to thank those 96 students who gave their time to complete the three adminstrations of the tests; their parents who consented to their participation in the project; and to the teachers and administrators of the three participating schools, Hendrick Hudson, Lakeland, and Yorktown Heights, all of northern Westchester County, New York.

Special thanks should be given to the Guidance personnel at the three schools, namely, William Burke, James Sotis, Robert Kellogg, Charlotte Heuss, Morton Baron, Ethel Beck, and Daniel Sanders. Their cooperation and support as liaison for the project, between students, parents, and school administration, has been invaluable.

Special consideration and thanks should be given to the staff at the Board of Cooperative Educational Services under the direction of Dr. C. C. Dunsmoor for their time and professional help. Their suggestions, cooperation and flexibility made it possible to meet the needs of the project and the schools involved.

To Dr. Noble Gividen, Superintendent of the First Supervisory District of Northern Westchester and Dr. Merle Ohlsen,

University of Illinois, our thanks for encouraging us to apply for this grant to test our feelings about group counseling.

We wish to thank our secretaries Lynne Bryant and Helen Kinney, Virginia Rowedder, Karin Orban, and the others at the Guidance Center who helped over the two years with the many clerical tasks necessary in a project of this size.

We also extend our thanks to the International Business Machines Corporation, and especially to Dr. William Dorn, Agnes Kuhlke, and Robert Tatnell for their special assistance in the processing of our data and the use of their equipment.

Our consultants for this project included Drs. George Gasda, Merle Ohlsen, Merville Shaw, Clarence Mahler, Gordon Klopf, Clovis Hirning, and Nathan Jaspen. Needless to say, these people contributed a great deal to our thinking about group counseling research and its effect on acting-out underachieving junior high school boys.

This section would not be complete without special mention of the co-investigators and the Cooperative Research Branch of the U. S. Office of Education. Dr. Charles Combs was the group counselor for Yorktown Heights. He also did the groundwork for the Acting Out Scale used in this project. Dr. A. Mead Sniffen, group counselor at the Hendrick Hudson schools, spent many hours after the conclusion of the field work part of the project assisting with additional tasks needed to conclude the

report. Edward J. Gibian, the fourth member of our staff whose primary service was that of being an objective observer not involved in the public schools, played an active part in our staff meetings and contributed the more theoretical point of view. He took the major responsibility for the scoring of certain instruments. Without the cooperation and associative efforts of my co-workers, this project would have been impossible.

And lastly, our many thanks to the Cooperative Research Branch of the U. S. Office of Education for whetting our interest in the research of group counseling. Without their support a public school organization could not have conducted this study in a practical setting under very practical conditions.

CHAPTER I

STATEMENT OF PROBLEM

This study was concerned primarily with the conservation of human resources. It was an integral part of a long-range plan designed to investigate the application of group counseling to those pupils who possess varying levels of learning potential, achievement, and behavioral characteristics.

The pilot stage of this project, conducted in 1960, was directed toward demonstrating the effect of group counseling on various groups of pupils. The groups counseled included (1) a specially selected group of junior high school pupils who demonstrated acting-out behavior, (2) a non-structured group of high school pupils whose attendance in groups was voluntary, and (3) a selected group of high school boys who requested help with their problems and who indicated a desire to function as a closed group. Because this demonstration project was concerned initially with introducing this type of counseling into the local school system, no complicated design was pre-conceived. However, the experiences of the counselors suggested that a program with controls and designs was necessary to demonstrate the effects of group counseling.

The research reported here was restricted to underachieving junior high school boys with acting-out behavior. These students were chosen because they represented a serious problem to their respective teachers, tended to disrupt the learning process of their classmates and made up a group with a high potential dropout rate.

It was felt by the investigators that many of these pupils tended to have average to above-average intelligence but because of their emotional problems seemed unable to use their potential effectively. Schools often place students in classes as a result of intelligence and/or achievement test scores. Because these tests were academically weighted they tended to penalize these individuals and place them in classes not in keeping with their true, but unrealized, potential. These pupils frequently were resistant toward school and tended to follow a pattern of socially inappropriate behavior. Ruth Strang[1] stated that, "The way an individual perceives himself in his world largely determines his behavior. If a gifted child conceives himself as only an average boy and a boy who can't learn to read or a worthless person, he will not put forth the effort necessary for accomplishment in any line of endeavor. If, on the other hand, he accepts the concept of himself as an able person with responsibilities for his gifts, he would tend to act accordingly." Murphy[2] also felt that self-realization was an indispensable condition for good mental health.

If the pressures or anxieties felt by these pupils were relieved they would not be so inclined to forfeit their educational advantages at too early a point in their learning career. This period of their life is naturally a very hectic one. So far, they have been unable to cope with either their adolescent problems or those presented by the structured classroom. Through counseling it was hoped these pupils would make a more satisfactory adjustment to school situations. Students of this age are more amenable to the group process than to individual counseling because they are concerned especially with being understood and accepted by their peers. In the counseling groups they not only come to feel better understood and accepted, but they also learn to empathize with and help others. Ackerman[1] found similar results while working with groups of mixed adolescents. His students not only came to feel better understood by others, but also learned to be sensitive to the feelings of others and increased their ability to accept the idiosyncracies of other people.

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[1] Strang, Rugh, "The Nature of Giftedness," Chapter IV, Education for the Gifted, National Society for Study of Education, University of Chicago Press, Chicago, 1958, p.73.

[2] Murphy, Gardner, "Self-Realization and Mental Health," Bulletin of the Menninger Clinic, 1959, 23:81;-84

In addition to involving these pupils in a group counseling framework, it was important to investigate the influence of their teachers. It was believed that these teachers' attitudes play a major role in determining pupils' reactions to their school environment. By discussion of individual problems as well as the problems general to these types of groups with the teachers, greater understanding and change could be demonstrated.

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[1] Ackerman, N. W., "Group Psychology with a Mixed Group of Adolescents," International Journal of Group Psychotherapy, 1955, 5: 249-60

RELATED RESEARCH

1. Zimet, Carl M. and Fine, Harold J., "Personality Changes With a Group Therapeutic Experience in a Human Relation Seminar," Journal of Abnormal and Social Psychology, 51: 68-73, July, 1955.

These investigators found that a group centered discussion produced better results than lectures. The picture story test showed that the group centered approach produced more concern about understanding, respecting, and aiding others; and that as the individual perceives himself, other adults and children in a more positive light, his behavior in a group setting also becomes more positive.

2. Hertzman, J., "Dynamic Group Experiences for Teachers and Students in the Classroom," International Journal of Group Psychotherapy, 9: 99-110, January, 1959.

Hertzman described the use of group meetings with teachers as a good way of handling student discussions in human relations. He stated that as teachers became sensitized to their own feelings and reactions in the group setting, they in turn became alerted to the dynamics of the classroom.

3. Cohn, B., Ohlsen, M. M., and Proff, F. C., "Roles Played by Adolescents in an Unproductive Counseling Group," American Personnel and Guidance Journal, 38: 724-731, May, 1960.

The roles played by members of an unproductive group of gifted adolescents were identified and described. These roles satisfied their function of: (1) describing the group; (2) reflecting change in the group; (3) describing members of the group; and (4) allowing for a comparison of groups. Twenty roles were identified in three major categories: informative, positive, and negative. By using "progress ratio," which is calculated by dividing the frequency of positive roles by the sum of positive and negative roles played, a rough index of a degree of progress an individual has made during the counseling process can be determined.

4. Daniels, E. M., et al, "A Group Approach to Pre-Delinquent Boys, Their Teachers and Parents, in a Junior High School," International Journal of Group Psychotherapy, 10: 346-352, July, 1960.

The authors describe selected areas of a pilot project with boys in a junior high school who were regarded as pre-delinquent. The project, conducted in a junior high school setting was to involve, in addition to the boys, their teachers, and parents. Certain changes are reported as having apparently resulted from the influence of the group sessions on the teachers and on the boys. The boys seemed "easier to live with," did not as often as previously ask to be excused from class, and performed with less acting-out behavior than before the sessions. It was found impossible to carry out the parent phase of this project. The teacher phase of the project appeared to be successful, with favorable changes in the school climate and more constructive involvement of the teachers with the boys.

5. Caplan, W. W., "The Effect of Group Counseling in Junior High School Boys' Concept of Themselves in School," Journal of Counseling Psychology, 4: 124-128, Summer, 1957.

Caplan worked with a group of junior high school boys ranging from twelve to fifteen years of age who were classified by teachers as unruly, anti-social, unteachable or incorrigible. Using the regular school counseling staff as group counselors he found a significant change within each experimental sub-group as well as within the total experimental group in terms of self-concept, school achievement and school behavior. He concludes, "the results indicate that group counseling is a promising method for dealing with many of the problems of adolescence and warrants serious consideration and further investigation."

6. Gersten, Charles, "An Experimental Evaluation of Group Psychotherapy with Juvenile Delinquents," International Journal of Group Psychotherapy, 1: 311-318, September, 1951.

The members of Gersten's experimental group changed significantly and in a positive direction as opposed to the control group that did not change, with reference to (1) their scores on the Wechsler-Bellevue and Stanford Achievement Tests; and (2) their emotional security and social maturity. In general those who were counseled became less inhibited and evasive, more productive, more responsive to mature promptings from within, and better able to establish wholesome relationships with others.

7. Blau, T. H., "Report on a Method of Predicting Success in Psychotherapy," Journal of Clinical Psychology, 6: 403-406, October, 1950.

His data suggest that the attitudes towards self, toward the counselor, and toward others are important factors in predicting success in counseling.

8. Schulman, Irving, "Transference, Resistance, and Communication Problems in Adolescent Psychotherapy Groups," International Journal of Group Psychotherapy, 9: 496-503, October, 1959.

> In working with adolescents aged thirteen to seventeen with groups homogeneously female, homogeneously male, and mixed, Schulman found that the topics discussed were mainly those concerned with immediate reality relationships. He also found it necessary to use different techniques with these adolescent groups than are customarily associated with adult therapy groups. For instance, it seemed necessary to call upon specific group members to express themselves about a particular matter, thus taking a more active role than would usually be the case with adults. In addition, it became essential for the therapist to concern himself with physical expressions of anxiety such as kicking under the table, throwing things, walking around, and so forth. This type of behavior, if allowed to continue, was found frequently to lead to a disintegration of the group.

9. McDaniel, H. and Johnson, D. A., "Effect of Group Counseling on Achievers and Underachievers," Journal of Secondary Education, 37: 136-139, March, 1962.

> In this study of bright eighth grade students with good reading ability ten achievers and ten underachievers were counseled. Both groups are reported as feeling that the greatest value of group counseling to them as individuals was the realization that they were not alone in their problems. All reported signs of improving adjustment to their situations. Information from the recordings revealed differences in the methods of control used by parents of children in each group, differences in attitudes of the groups toward the meaning of non-conformist behavior, and differences in terms of motivation.

10. Ohlsen, M. M., Proff, F. C., and Southard, C., "The Effects of Group Counseling on Two Groups of Gifted Adolescent Underachievers," mimeographed paper College of Education, University of Illinois, Urbana, Illinois, 1959.

> This study indicated the trend toward the improvement of grades by two groups of gifted adolescent underachievers. Clinical observers' pre- and post-evaluations showed significant growth for one of the two groups. This was supported by parents' evaluations but not by significant improvement in picture stories. The second group appeared to warrant general agreement that it did not make significant growth.

11. Broedel, J., Ohlsen, Merle M., Proff, F. C., and Southard, C., "The Effects of Group Counseling on Gifted Underachieving Adolescents." Paper developed as a result of Cooperative Research Project No. 623, titled The Extent to which Group Counseling Improves the Academic and Personal Adjustment of Underachieving Gifted Adolescents, College of Education, University of Illinois, Urbana, Illinois, 1960.

> This paper describes significant positive changes in behavior as a result of group counseling. However, group counseling appeared to have a negative influence on grades at least in an immediate sense. Although group members' own descriptions of themselves became more negative as indicated by pre- and post-testing, the authors report this as being in much better agreement with observers' perceptions of the group members.

OBJECTIVES

The primary function of this project was to demonstrate the effect of group counseling on underachieving junior high school boys with acting-out behavior. A secondary concern was to demonstrate the effect of teachers' attitudes toward this type of student. Past research has indicated that, through group counseling, gains might be expected in the areas of social behavior and adjustment, and attitudes toward school and school achievement. Teachers' attitudes also play a large part in contributing to the acting-out behavior of these boys. It has been suggested in the research that group meetings with teachers might be a valuable technique in assisting these students toward a better school adjustment. In light of this research, this project proposed to demonstrate certain specific applications of these previous findings.

1. To what extent was growth achieved by those boys counseled in groups reflected in Pre, Post and Follow-up testing?
2. If two groups received counseling, was the group whose teachers were involved in group discussions significantly improved over the group whose teachers were not so involved?
3. Did the counseling of students in groups promote a significantly greater improvement than involving teachers in discussion groups?
4. Did combining group counseling with teacher discussion groups effect more growth than just involving teachers in discussion groups?

5. To what extent did teachers' attitudes toward pupils change after participating in discussion groups?
6. What were the topics discussed by these junior high school boys in the group counseling sessions?
7. Did the spontaneous roles played by individuals in the counseling groups differentiate those who improved as opposed to those who did not?
8. Did three similarly-trained counselors differ as to the roles played when counseling like groups of junior high school boys who demonstrated acting-out behavior, and who were underachieving?

PROCEDURE

In order to test the consistency of results over a larger population, three schools in similar socio-economic areas were involved in the same project design. Two experimental counseling groups and a teacher discussion group were conducted by the same counselor. However, a different counselor was responsible for each school. The three counselors involved served as consultants with the Board of Cooperative Educational Services and were experienced in both individual and group counseling.

Each experimental group was counseled for one classroom period twice a week for a period of 25 sessions. Each teacher discussion group met once a week for a period of 13 sessions. All student and teacher meetings were tape-recorded. During the counseling sessions with students, each member was given a blank sheet of paper and asked to write his name and date at the top of the page. This paper was used for doodling and was returned to the counselor at the end of each session. For the teachers' discussion group a list of generalized incidents extracted from the tape recordings of the student groups was presented for discussion. These topics served as initiating statements for the group interaction which followed.

All students in the 7th and 8th grades were tested early in the school year of 1961 (for selection). The evaluative instruments were administered to all members of the project during November and December of the same year (Pre testing). In the Spring of 1962, after counseling, the evaluative instruments were administered again (Post testing). A follow-up or delay period of one year was allowed to elapse in order to determine what change, if any, was maintained and then the evaluative instruments were again administered to all members of the project (Follow-up testing).

Selection of Sample -- Students

The California Test of Mental Maturity, the Stanford Achievement Test and the Kvaraceus Delinquency Proneness Scale were administered to all 7th and 8th grade students in the three schools (approximately 1250 students -- see Table 1). However, only boys were considered for the final selection.

TABLE 1

POPULATION TESTED FOR PROJECT

	Boys		Girls		
School	7th	8th	7th	8th	Total
School I	74	78	190		342
School II	114	143	288		545
School III	80	90	195		365
Totals	268	311	673		1252

To add to the information used in selection, teachers were asked to check the names of those boys who they felt demonstrated acting-out behavior. A short paragraph describing a typical acting-out boy was included with the list of all the 7th and 8th grade boys and then distributed to the teachers.

The descriptive paragraph described an acting-out boy as one whose characteristics were similar to these: disrupts classes, openly defiant of authority, talks back, is always ready to fight, goes with a negative "gang", anti-school or anti-social behavior in dress and action, irresponsible, or shows any kind of behavior that disrupts the class or annoys the teacher continually.

The selection of boys was made in the following manner: those who received an Accomplishment Quotient (AQ[1]) of 92 or lower, which was obtained by combining the mental age in months from the California Test of Mental Maturity and a median grade level in months from the Stanford Achievement Test; those who received a score above the mean for junior high school boys in general on the Kvaraceus Delinquency Proneness Scale (KD -9); and those who received at least two teachers' checks indicating that two or more teachers felt the boy was an acting-out student.

In order to rank these students with respect to degree of underachievement and acting-out behavior a School Adjustment Index (SAI) was developed. For this Index standard deviations for the AQ and KD Scale were used to give a weighted score from 1 to 10. Each teacher's check was given a weight of one. By adding the weighted scores it was possible to determine those students who were more underachieving and acting-out than others. Although the School Adjustment Index missed some of the students, it seemed to work satisfactorily for the purposes of the project. This weighting of the scores allowed the investigators to combine underachievement and acting-out behavior with relative weights given to each of the major factors.

[1] Monroe, Walter S. (ed) Encyclopedia of Educational Research, Revised Ed., MacMillan & Co., 1950, pp. 798-799.

Although this quotient has some serious limitations it was felt to be the most convenient indication of underachievement for this type of student.

By ranking the SAI's, students were placed in the experimental or control groups for their grades, taking into consideration their academic schedule. In other words, the 7th grade experimental group contained eight boys who could meet during a certain period two days a week and who had relatively the same SAI scores as the eight 7th grade boys who had been selected for the control group. The same process was followed with the 8th grade control and experimental groups.

Selection of Sample -- Teachers

All 7th and 8th grade teachers were asked to participate in the project. However, those finally selected were those teachers who taught either all 7th grade subjects or all 8th grade subjects. Those teachers who had some sections of both 7th and 8th grade subjects were dropped from the study. The pre-testing sample consisted of 10 teachers from each of two schools and 16 teachers from the other school. However, the final sample used for evaluation included 5 teachers from each school in the experimental group and 5 teachers from each school for the control. The school which originally had 16 teachers in the project was reduced to 10 teachers, either because the teachers left the system, or did not complete the Pre or Post testing batteries.

An arbitrary decision was made to consider the 8th grade teachers as the control group and the 7th grade teachers as the experimental group who would be involved in group discussions.

Evaluation -- Students

The following instruments were administered to the students for Pre, Post, and Follow-up evaluation:

1. The Wechsler Intelligence Scale for Children -- 10 subtests, the Verbal, Performance, and Full-scale scores were used in the study. The Vocabulary subtest was not included. The rationale for this test was that some subtests or part scores might be more susceptible to changes in anxiety than others. It was also suggested that individual intelligence test scores would improve and become a more accurate measure of their learning potential if counseling was effective.
2. Stanford Achievement Tests -- the achievement areas of Paragraph Meaning, Word Meaning, Language, Arithmetic Computation and Arithmetic Reasoning were used in the study. From these 5 areas a battery median was determined. In the actual comparison of scores, the K scales were used from the Stanford Achievement Test Manual (. . . "it is necessary for accurate measurement of growth to have scales of equal units or, as they are known, interval scales. To meet the need for such scales, there have been developed for each of the tests of Stanford Achievement Test so-called K-scales, which have units that are approximately equal throughout the entire range and which, therefore, are better adapted to reveal true growth patterns in the several functions. These K-scales are such that for all functions the

average performance of pupils of Grade 10.0 has a value of 100 and the unit of measurement is equal to one seventh the standard deviation of the scores of 5th grade pupils.")

3. The Kvaraceus Delinquency Proneness Scale -- this instrument was used to measure the change in a student's anti-social or delinquent-like behavior. All scores were increased by 20 points to eliminate the negative signs.
4. The Structured-Objective Rorschach Test -- although this instrument was standardized on adults, some minor revisions were made and the instrument administered to reflect some of the more basic personality changes within the limits of the instrument. (See Appendix A.)
5. The Acting-Out Scale -- a scale of 23 items was developed and administered along with the Colvin Silhouette[1] procedure to obtain some measure of an individual 's self-concept. (See Appendix B.)
6. School Grades -- the student's grades were recorded with the first quarter grade serving as his Pre test score; the fourth quarter and final average grades recorded for his Post test results, and the fourth quarter and final average the following year serving as the Follow-up test score. All grades were put in standard scores with a mean of 500 and a standard deviation of 100. This score

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[1] Colvin, R. W., "Friendship Selections as a Defense of the Self Concept," American Psychologist, 12: 372, 1957.

was based on the grade distribution of their respective 7th and 8th grade class. Only the grades for the four basic subjects of English, Mathematics, Social Studies and Science were used.

Evaluation -- Teachers

To evaluate change in teacher attitudes that were due to participating in the discussion groups, the following instruments were administered:

1. The Minnesota Teacher Attitude Inventory
2. The Survey of Interpersonal Values -- a measure of an individual's value system indicating scores for (1) Support, (2) Conformity, (3) Recognition, (4) Benevolence, (5) Independence, and (6) Leadership.
3. The Combs Apperception Test for School -- a TAT-type of instrument with cards showing different situations pertaining to the school environment. A scoring system was developed to indicate attitudes toward or against students and teachers.

ANALYZING THE DATA

In order to assist the reader to understand the comparison between groups, the following symbols were used to represent the four groups involved in the study:

X - represented the counseled group of pupils.

Xt - represented the counseled group of pupils whose teachers were also involved in discussion groups.

Ct - represented the group of pupils who did not receive counseling but whose teachers were involved in discussion groups.

C - represented the pupils who did not receive counseling and whose teachers were not involved in discussion groups.

Steps followed in answering the questions:

A. Questions 1 and 2 were answered by using the analysis of co-variance and the analysis of variance on our total sample of 96 students. By dividing our total sample into one group who received counseling (X + Xt = 48), and the control group who did not receive counseling (C + Ct = 48), Question 1 was answered. By dividing our total sample into those students whose teachers were involved in discussion groups (Xt + Ct = 48), and those students whose teachers were not involved in discussion groups (X + C = 48), we could answer Question 2.

B. Question 3 was answered by comparing those pupils who received counseling and whose teachers were not involved in discussion groups with those pupils who were not counseled but whose teachers were involved in discussion groups (X with Ct).

C. Question 4 was answered by comparing the results of the counseled group whose teachers were involved in discussion groups with a control group of pupils who did not receive counseling but whose teachers were involved in discussion groups (Xt with Ct).

D. For Question 5, the results of the three evaluative instruments for the experimental group of teachers were compared, on the Pre, Post and Follow-up testing, with the control group by analysis of co-variance and analysis of variance of mean gain.

E. Question 6 was answered by an analysis of the tape recorded sessions by our staff.

F. Questions 7 and 8 were concerned with the roles pupils and counselors played spontaneously in the counseling sessions. These questions were answered by using the roles described by Cohn, Ohlsen and Proff[1] along with their method of tabulating individual progress in the group. (Sessions 1, 2, 3 and 8, 9, 10 and 16, 17, 18 and 23, 24, 25 were analyzed.)

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[1] Cohn, B., Ohlsen, M. M., and Proff, F. C., "Roles Played by Adolescents in an Unproductive Counseling Group."

Statistical Methods

For Questions 1, 2, and 5, analysis of co-variance and analysis of variance were calculated comparing the three administrations of evaluative instruments. An analysis was made of the Pre test scores, and analysis of the Post test scores corrected for the Pre test, and an analysis of the Follow-up test corrected for the Pre test. A detailed description of the statistical analysis is included in Appendix C.

Questions 3, 4, and 6 were not statistically treated.

For Questions 7 and 8, roles played were compared with Spearman's rank difference correlation coefficient (rho).

In addition to the preceding, a Parent Survey was made after the counseling period at Post test time and after the one year delay during the Follow-up testing period. A"t"test was used to show which items were significantly different in control and experimental students. (See Appendix E.)

A Teacher Survey was made after the Follow-up testing period and, again a"t"test was used to indicate significant differences between experimental and control groups. (See Appendix F.)

Although doodles were collected for practically all students and for all counseling sessions, time did not permit for a critical analysis of these drawings.

CHAPTER II

RESULTS

Needless to say, all the pertinent implications that could be extracted from our data are not included in this report. Much more time is needed to consider the more intimate interactions between groups and individuals, and to explain some of the inconsistencies appearing in the analysis of co-variance. The comparisons between groups was not undertaken as a part of this study because of the small N's involved. It was felt that this kind of a study using N's of 8 or 24 should be handled separately because of the interpreting limitations and because of the many computations that would be necessary to determine significance and relationships. However, the data are available at our office for these analyses.

This section describing the results will be grouped into the following seven major headings which coincide with the major objectives of the study:

- I. Counselor Effect
    - A. Analysis of Co-Variance
    - B. Analysis of Variance
    - C. Description of Means
- II. Teacher Effect
    - A. Analysis of Co-Variance
    - B. Analysis of Variance
- III. Group Comparisons
- IV. Counselor Effect on Teachers
- V. Topics Discussed by Experimental Groups
- VI. Roles Played during Counseling Sessions by Students and Counselors
- VII. Parent Survey

Table 2 describes the sample group. The California Test of Mental Maturity (CTMM) and the Stanford Achievement Test were combined to determine the AQ; the AQ was then combined with the Kvaraceus Delinquency Proneness Score (KD) and with the Teacher Survey, evaluating acting-out behavior, to determine the School Adjustment Index (SAI). The Wechsler Intelligence Scale for Children, Stanford Achievement Test, Kvaraceus Delinquency Proneness Scale, and Acting Out Scale made up four of the five final evaluative instruments. The results of the Structured-Objective Rorschach Test (SORT) were not included in this Table.

The following analysis was based on whether or not our F ratios were significant at the .01, .05, or .10 per cent levels. Although the .10 per cent level does not necessarily define relationships between dependent and independent variables, there are arguments which tend to infer that the .10 per cent level could be used for significance in this study. The principle argument is that our N's were relatively small, therefore requiring large F's for significance. These large F's are unusually difficult to reach for the types of data and treatment used.

The primary statistic used was the analysis of co-variance with an N of 48 for each of the comparison groups. When the counseled group was compared with the non-counseled group, half of each group included those students whose teachers were also counseled (X + Xt = 48 and C + Ct = 48). When the teacher effect was measured we see that, here again, half of each group was composed of those students who also received counseling (Xt + Ct = 48 and X + C = 48). However, it was assumed that both comparison groups had the same amount of secondary effect added, and only one variable was measured.

All data were placed on IBM cards in the order described in Table 3. The first twelve columns were used for identification and the next twenty sets of three columns each were used for variables to be compared. Variable 21 (columns 73, 74, 75) was used only for Deck 1 and contained the Chronological Age in months. This column was not used in the overall analysis. Each student had five cards, representing a card for Decks 1, 2, 3, 4 (which became Deck 7), and 6. Deck 5 was originally designed for the Parent Survey; however, because of our unequal N's it became impossible to use the analysis of co-variance for these scores. Deck -0 contained the information for comparison of those teachers involved, or not involved, in group discussions.

The actual statistical program was developed for machine calculation by our statistician, Dr. Nathan Jaspen. This program is described in Appendix C.

One of the shortcomings of this design was that no control was made for separating the Teacher and Grade effect. Those students whose teachers were involved in the study were all 7th graders as compared with the control group of 8th graders whose teachers were not involved in the study. The results between the two groups could not be separated or attributed to either Teachers or Grade and had to be considered a result of a difference of Grade as well as of Teachers who were involved in discussion groups.

PRECEDING PAGE MISSING — Table 1

TABLE 2

PSYCHOMETRIC DESCRIPTION OF THE SAMPLE

Group	N	Average IQ (CTMM)^1	Average IQ (WISC)^1	Stan. Ach. Med.	Average A Q^2	Average K D^3	Average A-O^4	Avera SAI^5
7th Gr.Exper.	24	103.71	103.17	6.1	82.83	+2.75	13.93	12.25
8th Gr.Exper.	24	95.67	101.88	6.5	82.92	-1.00	13.66	12.92
Total Exper.	48	99.69	102.53	6.3	82.88	+0.88	13.80	12.59
7th Gr.Control	24	98.92	104.21	6.2	83.96	+1.46	13.19	11.54
8th Gr.Control	24	101.21	105.88	6.8	83.38	-0.79	13.13	11.67
Total Control	48	100.07	105.05	6.5	83.67	+0.34	13.16	11.61

1. There were many discrepancies with reference to the IQ's throughout the sample. However, generally speaking, IQ's were higher on the individual intelligence test than on the paper-and-pencil test. The greatest discrepancies occurred between the verbal section of the Wechsler and the language section of the California Test of Mental Maturity.

2. An Achievement Quotient (AQ) was obtained by dividing the Achievement Age (from the median grade placement on the Stanford Achievement Tests) by the Mental Age (from the CTMM). An AQ of 92 was considered underachievement.

3. Scores of this sample on the Kvaraceus Delinquency Proneness Scale ranged from +16 (delinquency prone) to -7 (borderline proneness to delinquency). As can be seen from the table, the seventh-grade students on the average appear to be slightly more delinquency prone than do the eighth-grade students on the average.

4. The Acting-Out Scale (A-O) ranged from 1 to 36 - the lower the number, the better the self concept. If 18 were considered the midpoint, it would seem these students in general feel they have a better-than-average concept of themselves.

5. By weighting the AQ, K D score, and the number of teachers' checks received by each student, a School Adjustment Index (SAI) was obtained. This index was used for selection and matching purposes only, and at present has no other descriptive value. The range for this index was from 22 to 9 - the higher the number, the more negative the characteristics considered.

TABLE 3

VARIABLES

DECK NO.	IDENTIFYING DATA							1	2	3	4	5	6 *	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
Col. No.⇒	1	2	3 - - 6	7-8	9	10	11-12	13 15	16 18	19 21	22 24	25 27	28 30	31 33	34 36	37 39	40 42	43 45	46 48	49 51	52 54	55 57	58 60	61 63	64 66	67 69	70 72	73 75
1	Testing Period 1)Pre 2)Post 3)Fol-up	Deck Number 1 - 6	Student Identification Number 0001 - 0096	School Number: 01 HH, 02 L, 03 YH	1) Counseled 2) Not Counseled	1) Teacher 2) No Teacher	Number of variables on card	←— Wechsler Intelligence Scale for Children —→ (scaled score)														←— Stanford (K score) —→						C A
2								←— SORT Factors (T scores) —→																				
3								←— Acting Out Scale (raw scores, numbers 1 - 20) —→																				
# 4								←— A-O —→ (21-23)			K D	←— SORT Combination Scores —→																
** 5								←— Parent Questionnaire (post only) —→																				
6								←— Grades (T scores) —→																				
-0 Teach.								←— Survey of Inter- personal Values —→						M T A I	←— Combs Apperception Test —→													

* Did not use
# At Post to Follow-up, revised to Deck 7
** Not put on IBM cards

Counselor Effect

A. The Wechsler Intelligence Scale for Children

On Table 4, the analysis of co-variance yielded no pattern of significant change due to counseling over the three test administrations. The counseled group showed a gain on the Information section from Pre to Post testing. However, this gain was not maintained over the follow-up period. After the follow-up period, the group who did not receive counseling did better on the Digit Symbol subtest than those receiving counseling.

On Table 5, the analysis of variance, the mean gain made by the counseled group on the Information subtest from Pre to Post testing was not maintained through the delay period.

B. Stanford Achievement Test

Looking at the data from this test as shown on Table 6, the group who did not receive counseling made a significantly higher score on the Arithmetic Reasoning subtest after the counseling period. This gain was lost during the delay period. The mean gain, shown on Table 7, did not reflect any significant changes.

C. Grades

The academic grades, or marks, earned by the students in the project were relatively stable except for the 4th quarter marks in English. Those students who did not receive counseling made better marks after the counseling period than those students who received counseling. However, here again, the gain was not maintained through the follow-up period. Table 7 shows no significant items for the analysis of variance.

D. Kvaraceus Delinquency Proneness Scale

This test measures a person's leaning toward delinquency-type behavior and a lower score is desirable. On Tables 4 and 5, note the non-counseled group made significantly large gains in favor of more socially acceptable behavior than did the counseled group over the follow-up period.

E. The Acting Out Scale

This is an instrument developed to quantify an individual's self-concept with regard to 23 variables. On Table 8, the analysis of co-variance reflected gains after the counseling period in favor of the non-counseled group for two items - Acceptance of Peers and Motivation. After the delay period, the counseled group felt that they were better able to Cooperate with other students and teachers. On Table 9, the mean gains reflect the fact that the counseled group felt more Adequate with regard to intelligence than the non-counseled group and this gain was maintained throughout the delay period. Also during the delay period, these students felt more Cooperative toward Others and felt they were more Accepting of their Peers.

F. Structured-Objective Rorschach Test

Table 10 shows the analysis of co-variance on this instrument which tends to measure,in a semi-projective way, an individual's personality structure. As a result of counseling, the experimental group had significantly more Original responses than the control group and tended to be more Non-conforming. During the follow-up period the experimental group had significantly higher scores for the Animal determinant than the control group. (This variable is not individually interpreted. Its primary service is to act as a contributing score for the combination variable called "Range of Interests".)

On Table 11 the mean gains were not significant for any variable either after counseling or after the delay period.

TABLE 4

ANALYSIS OF CO-VARIANCE FOR COUNSELOR EFFECT SHOWING ADJUSTED MEANS AND F RATIOS - COUNSELED AND NON-COUNSELED GROUPS - FOR WECHSLER INTELLIGENCE SCALE FOR CHILDREN AND KVARACEUS DELINQUENCY PRONENESS RESULTS

Variable	Pre - Post			Pre - Follow-up			Post - Follow-up		
Wechsler Intelligence Scale for Children	$A\bar{X}$ C	$A\bar{X}$ NC	F Ratio	$A\bar{X}$ C	$A\bar{X}$ NC	F Ratio	$A\bar{X}$ C	$A\bar{X}$ NC	F Ratio
Information	11.97	11.36	3.318 !	12.05	11.77	0.434	11.78	12.03	0.381
Comprehension	10.48	10.79	0.454	10.46	10.92	0.794	10.52	10.86	0.523
Arithmetic	9.82	10.12	0.570	10.25	10.35	1.708	10.34	10.76	0.741
Similarities	11.83	12.19	0.789	11.78	11.41	0.982	11.80	11.38	1.188
Digit Span	9.87	10.01	0.120	9.97	9.88	0.058	10.11	9.75	0.872
Picture Completion	11.97	12.30	0.499	12.30	12.89	1.301	12.36	12.82	0.899
Picture Arrangement	11.70	11.45	0.262	12.75	11.96	1.788	12.71	11.99	1.568
Block Design	10.98	11.02	0.014	11.82	11.68	0.128	11.75	11.75	0.000
Object Assembly	11.96	11.77	0.171	12.52	12.23	0.327	12.38	12.37	0.001
Digit Symbol	11.09	11.47	0.764	11.50	12.25	2.962 !	11.63	12.12	2.188
Verbal Intelligence	105.03	105.45	0.086	105.85	105.86	0.000	105.86	105.84	0.000
Performance Intelligence	110.92	111.16	0.019	114.73	115.35	0.120	114.52	115.57	0.343
Full Scale Intelligence	108.62	108.81	0.023	111.02	111.27	0.030	110.95	111.35	0.082
Kvaraceus Delinquency Proneness (lower score more desirable)	18.07	18.66	0.122	19.11	14.29	9.254 *	19.24	14.15	10.733 *

* = significant at .01% level
** = significant at .05% level
! = significant at .10% level

each group has an N of 48

TABLE 5

ANALYSIS OF VARIANCE FOR COUNSELOR EFFECT
SHOWING MEAN GAINS AND F RATIOS - COUNSELOR AND NO-COUNSELOR GROUPS -
FOR WECHSLER INTELLIGENCE SCALE FOR CHILDREN AND KVARACEUS DELINQUENCY PRONENESS RESULTS

Variable	Pre - Post			Pre - Follow-up			Post - Follow-up		
Wechsler Intelligence Scale for Children	$\bar{X}$ GAIN C	$\bar{X}$ GAIN NC	F Ratio	$\bar{X}$ GAIN C	$\bar{X}$ GAIN NC	F Ratio	$\bar{X}$ GAIN C	$\bar{X}$ GAIN NC	F Ratio
Information	.83	.08	4.805 **	0.96	0.44	1.329	0.13	0.35	0.282
Comprehension	0.21	0.17	0.006	0.21	0.27	0.009	0.0	0.10	0.042
Arithmetic	- .02	0.31	0.509	0.42	1.04	1.477	0.44	0.73	0.301
Similarities	0.69	0.77	0.034	0.69	-0.06	2.506 !	-0.0	-0.83	3.200
Digit Span	0.06	0.44	0.830	0.10	0.38	0.422	0.04	-0.06	0.051
Picture Completion	1.06	1.25	0.144	1.42	1.81	0.490	0.35	0.56	0.151
Picture Arrangement	0.92	0.77	0.063	1.96	1.29	0.926	1.04	0.52	0.624
Block Design	0.90	0.77	0.115	1.69	1.48	0.292	0.79	0.71	0.046
Object Assembly	1.60	1.15	0.829	2.15	1.63	0.950	0.54	0.48	0.013
Digit Symbol	1.13	1.46	0.597	1.58	2.19	1.721	0.46	0.73	0.501
Verbal Intelligence	2.21	2.19	0.000	3.08	2.54	0.103	0.88	0.35	0.097
Performance Intelligence	7.92	7.52	0.048	11.75	11.69	0.001	3.83	4.17	0.031
Full Scale Intelligence	5.23	4.94	0.050	7.73	7.29	0.079	2.50	2.35	0.010
Kvaraceus Delinquency Proneness (lower score more desirable)	-2.67	-1.71	0.218	-1.60	-6.10	5.770 **	1.06	-4.40	7.828 *

* = significant at .01% level
** = significant at .05% level
! = significant at .10% level

each group has an N of 48

TABLE 6

ANALYSIS OF CO-VARIANCE FOR COUNSELOR EFFECT SHOWING ADJUSTED MEANS AND F RATIOS - COUNSELED AND NON-COUNSELED GROUPS - FOR STANFORD ACHIEVEMENT TEST RESULTS AND GRADES

Variable	Pre -Post			Pre-Follow-up			Post-Follow-up		
Stanford Achievement Test	$A\bar{X}$ C	$A\bar{X}$ NC	F Ratio	$A\bar{X}$ C	$A\bar{X}$ NC	F Ratio	$A\bar{X}$ C	$A\bar{X}$ NC	F Ratio
Paragraph Meaning	83.46	83.25	.019	89.69	86.85	0.008	89.34	90.20	0.253
Word Meaning	86.05	86.45	0.066	86.66	85.70	0.199	86.83	85.53	0.539
Language	82.29	83.82	1.002	95.22	94.66	0.158	95.60	94.28	1.104
Arithmetic Reasoning	81.14	85.16	5.696 **	83.52	85.25	0.593	84.66	84.11	0.067
Arithmetic Comprehension	73.58	76.50	1.442	58.89	62.57	0.945	59.47	61.98	0.465
Battery Median	81.37	83.27	2.351	36.73	87.16	0.061	87.40	86.49	0.346
Grades									
English	413.10	442.34	3.583 !	425.65	430.99	0.076	430.74	425.90	0.061
Final Marks							419.59	428.60	0.332
Math	450.70	459.98	0.235	453.62	455.98	0.012	452.81	456.79	0.038
Final Marks							443.04	440.48	0.018
Social Studies	463.04	460.82	0.022	436.94	456.79	1.044	435.72	458.01	1.616
Final Marks							442.46	452.04	0.388
Science	470.36	465.85	0.072	449.05	478.16	1.509	446.57	480.64	2.300
Final Marks							463.98	485.27	1.654

* = significant at .01% level
** = significant at .05% level
! = significant at .10% level

each group has an N of 48

TABLE 7

ANALYSIS OF VARIANCE FOR COUNSELOR EFFECT SHOWING MEAN GAINS AND F RATIOS -- COUNSELED AND NON-COUNSELED GROUPS FOR STANFORD ACHIEVEMENT TEST RESULTS AND GRADES

VARIABLE	PRE-POST			PRE-FOLLOW-UP			POST FOLLOW-UP		
	XGainC	XGainNC	F Ratio	XGainC	XGainNC	F Ratio	XGainC	XGainNC	F Ratio
Stanford Achievement									
Paragraph Meaning	2.42	1.54	0.278	8.44	8.35	0.002	6.02	6.81	0.209
Word Meaning	4.67	5.06	0.055	5.27	4.31	0.201	0.60	-0.75	0.388
Language	-6.92	-8.23	0.242	6.15	2.48	1.747	13.06	10.71	2.392
Arithmetic Reasoning	3.94	6.46	1.783	6.06	6.81	0.107	2.13	0.35	0.735
Arithmetic Comprehension	18.08	19.73	0.081	3.79	6.19	0.377	-15.08	13.54	0.178
Battery Median	1.67	3.00	0.992	6.94	6.98	0.001	5.27	3.98	0.719
Grades									
English	-4.83	20.90	2.556	9.46	7.81	0.006	14.29	-13.08	1.496
Final Marks							-0.25	1.65	0.011
Math	-12.77	-22.54	0.137	-9.52	-26.88	0.152	3.25	-4.33	0.118
Final Marks							-5.35	-17.00	0.362
Social Studies	25.65	12.33	0.636	2.90	4.96	0.009	-22.75	-7.38	0.650
Final Marks							-3.52	-6.67	0.035
Science	18.56	-1.10	1.137	1.08	7.38	0.060	-17.48	8.48	1.103
Final Marks							4.79	16.60	0.476

* = significant at .01% level
** = significant at .05% level
! = significant at .10% level

Each group has an N of 48

TABLE 8

ANALYSIS OF CO-VARIANCE FOR COUNSELOR EFFECT SHOWING ADJUSTED MEANS AND F RATIOS - COUNSELED AND NON-COUNSELED GROUPS - FOR ACTING OUT SCALE RESULTS

Variable	Pre - Post			Pre - Follow-up			Post - Follow-up		
	$A\bar{X}$ C	$A\bar{X}$ NC	F Ratios	$A\bar{X}$ C	$A\bar{X}$ NC	F Ratios	$A\bar{X}$ C	$A\bar{X}$ NC	F Ratios
Acting-Out Scale									
1. Self Adequacy	14.68	16.30	0.002	14.75	16.02	1.133	15.20	15.57	0.118
2. Achievement	18.02	17.81	0.020	18.38	16.76	1.829	18.42	16.73	2.427
3. Cooperation	14.09	14.37	0.043	12.40	14.79	3.825 !	12.60	14.58	3.259 !
4. Reputation	14.41	13.09	0.883	13.28	13.62	0.082	13.03	13.86	0.610
5. Cooperation	13.48	12.62	0.416	12.95	11.88	1.042	12.83	12.00	0.819
6. Acceptance of Self	12.30	10.92	1.516	13.12	12.73	0.116	12.81	13.04	0.044
7. Acceptance of Peers	9.64	9.53	0.013	9.92	9.85	0.004	9.92	9.85	0.008
8. Acceptance of Authority	12.74	11.24	1.166	13.03	11.67	1.429	12.71	12.00	0.451
9. Acceptance of Others	14.07	13.41	0.216	13.38	12.04	1.365	13.27	12.15	1.099
10. Self Confidence	12.56	13.35	0.293	12.93	11.99	0.746	12.92	12.00	0.760
11. Acceptance of Others	12.20	11.78	0.144	12.09	11.26	0.608	12.04	11.32	0.563
12. Acceptance of Peers	12.69	10.19	4.116 **	11.29	12.04	0.502	10.39	12.40	2.111
13. Acceptance of Authority	10.47	8.74	2.572	10.89	9.38	1.801	10.50	9.77	0.470
14. Self Adequacy	13.49	11.90	1.372	12.25	12.71	0.197	11.95	13.01	1.260
15. Self Adequacy	13.46	12.46	0.702	12.34	12.71	0.120	12.11	12.93	0.821
16. Cooperation	11.19	12.98	2.359	12.09	13.68	2.289	12.56	13.21	0.517
17. Acceptance of Others	10.85	11.13	0.052	11.15	11.47	0.087	11.33	11.29	0.001
18. Acceptance of Authority	15.43	15.48	0.001	13.07	13.78	0.286	13.18	13.67	0.148
19. Acceptance of Authority	14.53	12.92	1.156	13.37	11.98	1.578	13.02	12.33	0.596
20. Impulsiveness	13.13	14.52	0.957	12.61	12.69	0.004	13.03	12.26	0.611
21. Motivation	11.81	8.88	3.292 !	11.30	11.60	0.042	10.86	12.03	0.654
22. Acceptance of Peers	11.05	12.77	1.416	12.09	12.37	0.044	12.54	11.91	0.249
23. Acceptance of Authority	11.86	11.52	0.059	11.56	11.23	0.072	11.42	11.37	0.002

* = significant at .01% level
** = significant at .05% level
! = significant at .10% level

- each group has an N of 48
- lower score desirable

TABLE 9

ANALYSIS OF VARIANCE FOR COUNSELOR EFFECT
SHOWING MEAN GAINS AND F RATIOS - COUNSELED AND NON-COUNSELED GROUPS - FOR ACTING OUT SCALE RESULTS

Variable	Pre - Post			Pre - Follow-up			Post - Follow-up		
	$\overline{X}$ GAIN C	$\overline{X}$ GAIN NC	F Ratios	$\overline{X}$ GAIN C	$\overline{X}$ GAIN NC	F Ratios	$\overline{X}$ GAIN C	$\overline{X}$ GAIN NC	F Ratios
Acting-Out Scale									
1. Self Adequacy	-6.44	-3.73	3.397 !	-6.52	-3.85	3.139 !	-0.08	-0.13	0.001
2. Achievement	-2.71	-1.94	0.218	-2.50	-2.83	0.044	0.21	-0.90	0.590
3. Cooperation	-1.31	0.02	0.773	-3.25	0.69	6.262 **	-1.94	0.67	3.583 !
4. Reputation	0.90	0.27	0.137	-0.19	0.75	0.434	-1.08	0.48	1.629
5. Cooperation	-0.13	-0.15	0.000	-0.73	-0.81	0.004	-0.60	-0.67	0.003
6. Acceptance of Self	-1.71	-3.40	1.507	-0.83	-1.65	0.269	0.88	1.75	0.438
7. Acceptance of Peers	-1.19	-0.48	0.323	-0.96	-0.10	0.404	0.23	0.38	0.023
8. Acceptance of Authority	0.17	-0.81	0.422	0.46	-0.38	0.346	0.29	0.44	0.014
9. Acceptance of Others	0.75	-0.60	0.723	0.33	-2.25	2.102	-0.42	-1.65	0.608
10. Self Confidence	-2.27	-2.48	0.013	-1.96	-3.79	1.569	0.31	-1.31	1.376
11. Acceptance of Others	0.10	0.19	0.003	0.02	-0.35	0.073	-0.08	-0.54	0.181
12. Acceptance of Peers	-0.98	-1.90	0.376	-2.56	0.15	3.241 !	-1.58	2.04	7.736 *
13. Acceptance of Authority	0.08	-1.48	1.198	0.50	-0.83	0.788	0.42	0.65	0.037
14. Self Adequacy	-0.65	-2.17	0.994	-1.90	-1.35	0.157	-1.25	0.81	2.536
15. Self Adequacy	-1.15	-2.40	0.557	-2.23	-2.19	0.001	-1.08	0.21	1.314
16. Cooperation	-0.06	1.44	1.201	0.83	2.15	1.084	0.90	0.71	0.033
17. Acceptance of Others	-1.56	-0.67	0.380	-1.31	-0.27	0.557	0.25	0.40	0.010
18. Acceptance of Authority	3.58	4.06	0.100	1.08	2.50	0.827	-2.50	-1.56	0.352
19. Acceptance of Authority	2.15	1.06	0.435	0.88	0.23	0.189	-1.27	-0.83	0.126
20. Impulsiveness	-2.92	-0.71	1.788	-3.54	-2.44	0.474	-0.63	-1.73	0.789
21. Motivation	2.73	-0.67	3.997 **	2.44	1.83	0.106	-0.29	2.50	2.070
22. Acceptance of Peers	-3.08	-0.92	1.404	-2.06	-1.29	0.179	1.02	-0.38	0.850
23. Acceptance of Authority	-0.75	-1.58	0.303	-0.92	-2.00	0.494	-0.17	-0.42	0.027

* = significant at .01% level	
** = significant at .05% level	- each group has an N of 48
! = significant at .10% level	- lower score desirable

TABLE 10

ANALYSIS OF CO-VARIANCE FOR COUNSELOR EFFECT
SHOWING ADJUSTED MEANS AND F RATIOS - COUNSELED AND NON-COUNSELED GROUPS - FOR S-O RORSCHACH RESULTS

Variable		Pre - Post			Pre - Follow-up			Post - Follow-up		
S-O Rorschach		A$\bar{X}$ C	A$\bar{X}$ NC	F Ratios	A$\bar{X}$ C	A$\bar{X}$ NC	F Ratios	A$\bar{X}$ C	A$\bar{X}$ NC	F Ratios
Theoretical	W	33.11	34.85	0.682	38.84	40.43	0.489	39.17	40.10	0.154
Practical	D	55.41	54.22	0.371	51.04	49.23	1.094	50.99	49.28	0.596
Pedantic	Dd	67.98	67.08	0.207	65.33	65.25	0.001	65.09	65.49	0.030
Rigidity-Persistence	S	50.40	51.25	0.276	53.54	52.52	0.302	53.60	52.46	0.365
Structuring	F	61.64	60.03	0.532	58.64	57.75	0.126	58.34	58.06	0.011
Concentration	F-	63.06	61.98	0.322	61.04	59.07	1.154	61.17	58.93	1.476
Activity Potential	M	52.43	52.26	0.012	52.37	52.32	0.001	52.31	52.38	0.002
	FM	47.31	47.48	0.009	46.90	44.81	1.261	46.68	45.03	0.754
	FC	38.55	38.93	0.067	39.80	40.83	0.531	39.80	40.82	0.525
	CF	43.45	43.95	0.107	44.95	43.60	0.757	44.90	43.64	0.619
Anxiety	FCh	43.33	45.42	1.254	47.17	48.12	0.207	47.42	47.87	0.046
	A	45.41	45.21	0.013	49.01	45.65	2.799 !	49.05	45.62	2.855 !
Human Relationships	H	52.96	53.38	0.058	54.05	54.20	0.007	54.08	54.17	0.002
Popular	P	24.74	27.01	1.817	30.36	30.64	0.022	30.90	30.10	0.190
Original	O	73.87	69.13	3.352 !	65.82	64.38	0.254	64.79	65.42	0.047
Induction	W:M	85.55	87.10	0.308	91.30	92.66	0.200	91.40	92.56	0.135
Deduction	D:M	107.85	106.46	0.325	103.40	101.55	1.556	103.25	101.71	0.384
Concentration or Impulsiveness	F-:F	101.76	101.62	0.002	102.24	101.47	0.060	102.81	100.90	0.354
Range of Interests	H:P::A	93.17	94.74	0.566	92.88	96.52	2.078	92.76	96.63	2.264
Aggressiveness	F:M	114.09	112.27	0.515	111.09	109.99	0.146	110.55	110.53	0.000
Social Responsibility	FC:M	90.93	91.24	0.019	92.21	93.10	0.200	92.07	93.25	0.339
Cooperation	CF:FC	82.05	82.82	0.160	84.84	84.33	0.060	84.75	84.42	0.025
Tact	FM:FC::M	97.78	98.03	0.016	98.95	101.42	1.284	99.07	101.30	1.050
Confidence	FM:M	105.08	104.82	0.012	105.51	107.46	0.501	105.60	107.37	0.416
Consistent	F::S:FCh	121.25	118.06	1.291	114.83	113.94	0.077	114.53	114.24	0.007
Moodiness	FM:F::F:M	98.10	98.11	0.000	98.22	96.59	0.518	98.33	96.48	0.694
Flexibility	M::FC:CF	99.69	99.52	0.007	99.57	100.58	0.259	99.47	100.68	0.363
Conformity	O:P	50.90	57.85	2.909 !	64.56	66.23	0.141	66.35	64.44	0.194

* = significant at .01% level/ ** = significant at .05% level/ ! = significant at .10% level/ each group has an N of 48

TABLE 11

ANALYSIS OF VARIANCE FOR COUNSELOR EFFECT SHOWING MEAN GAINS AND F RATIOS - COUNSELED AND NON-COUNSELED GROUPS - FOR S-O RORSCHACH RESULTS

Variable		Pre - Post			Pre - Follow-up			Post - Follow-up		
S-O Rorschach		$\bar{X}$ GAIN C	$\bar{X}$ GAIN NC	F Ratios	$\bar{X}$ GAIN C	$\bar{X}$ GAIN NC	F Ratios	$\bar{X}$ GAIN C	$\bar{X}$ GAIN NC	F Ratios
Theoretical	W	-5.02	-3.25	0.489	0.71	2.33	0.377	5.73	5.58	0.003
Practical	D	3.46	2.13	0.330	-0.90	-2.88	0.733	-4.35	-5.00	0.062
Pedantic	Dd	3.67	2.02	0.333	0.90	0.31	0.049	-2.77	-1.71	0.153
Rigidity-Persistence	S	-2.25	-1.40	0.153	0.90	-0.13	0.196	3.15	1.27	0.643
Structuring	F	4.54	1.81	0.964	1.48	-0.40	0.415	-3.06	-2.21	0.069
Concentration	F-	3.25	3.73	0.050	1.25	0.81	0.041	-2.00	-2.94	0.139
Activity Potential	M	1.52	0.65	0.172	1.54	0.63	0.136	0.02	-0.02	0.000
	FM	-2.04	-0.44	0.451	-2.69	-2.88	0.004	-0.65	-2.44	0.471
	FC	-1.65	-2.02	0.047	-0.29	-0.23	0.001	1.35	1.79	0.052
	CF	-0.85	-0.88	0.000	0.60	-1.19	0.807	1.46	-0.31	0.703
Anxiety	FCh	-3.67	-2.04	0.569	0.27	0.56	0.012	3.94	2.60	0.281
	A	-4.44	-4.23	0.008	-0.83	-3.79	1.458	3.60	0.44	1.519
Human Relationships	H	-1.00	-0.44	0.069	0.08	0.40	0.019	1.08	0.83	0.011
Popular	P	-7.90	-5.92	0.764	-2.29	-2.27	0.000	5.60	3.65	0.977
Original	O	12.21	7.50	2.241	4.17	2.75	0.184	-8.04	-4.75	1.039
Induction	W:M	-3.50	-2.60	0.059	2.25	2.96	0.033	5.75	5.56	0.002
Deduction	D:M	4.98	2.77	0.517	0.65	-2.25	0.706	-4.33	-5.02	0.041
Concentration or Impulsiveness	F-:F	-1.29	1.94	0.700	-0.23	1.21	0.169	1.06	-0.73	0.174
Range of Interests	H:P::A	0.04	1.02	0.113	-0.29	2.83	1.026	-0.33	1.81	0.405
Aggressiveness	F:M	6.06	2.46	1.351	3.02	0.23	0.696	-3.04	-2.23	0.055
Social Responsibility	FC:M	-0.13	-1.38	0.174	1.25	0.40	0.082	1.38	1.77	0.017
Cooperation	CF:FC	-2.50	-2.90	0.027	0.31	-1.42	0.448	2.81	1.48	0.249
Tact	FM:FC::M	1.98	-0.23	0.534	3.27	3.04	0.005	1.29	3.27	0.424
Confidence	FM:M	3.56	1.08	0.520	4.23	3.50	0.032	0.67	2.42	0.247
Consistent	F::S:FCh	6.65	3.46	0.809	0.23	-0.67	0.059	-6.42	-4.13	0.325
Moodiness	FM:F::F:M	-2.40	0.46	1.175	-2.19	-1.17	0.134	0.21	-1.60	0.440
Flexibility	M::FC:CF	1.08	0.02	0.140	1.00	1.04	0.000	-0.08	1.02	0.160
Conformity	O:P	-20.10	-13.42	1.747	-6.46	-5.02	0.079	13.65	8.40	1.249

*=significant at .01% level/ **-significant at .05% level/ !=significant at .10% level/ each group has an N of 48

Mean Trends of Counselor Effect

Tables 12 through 17 describe the means for the 7th grade experimental and control group, as well as the 8th grade experimental and control group on all variables measured.

The Wechsler Intelligence Scale for Children results, shown at the bottom of Tables 12 and 13, indicate that the 7th grade students responded in very much the same way whether they received counseling or not. They all tended to make better scores on the second and the third administration of this test, which could have been due to the practice effect. It is interesting to note, however, that the improvement shown on the Verbal section was much less than the improvement demonstrated on the Performance subtest.

When we look at the 8th grade results, the same kinds of improvement are shown throughout the instrument. However, one fact stands out and that is, that for the 8th grade students, the experimental group had at least a 4 point lower IQ to begin with than the control group. If intelligence plays a part in an individual's ability to respond to group counseling, this might be an important consideration.

The Stanford Achievement Test seemed to yield little difference as a result of group counseling. Any changes experienced by the experimental groups seemed to be also experienced by those in the control groups.

For students' Grades, or marks, there seemed to be little consistent change at the 7th grade level due to counseling. In other words, the control group responded very much like the experimental group. However, when we look at the 8th grade performance in class as reflected in marks, we do see consistent change in favor of the experimental groups. Here, it seems that counseling made an effect on school grades.

On the Kvaraceus Delinquency Proneness Scale, (Tables 14 and 15) we see again that all four groups improved from the Pre to Post testing. While the 7th grade, in both experimental and control groups continued improving during the follow-up period, the 8th grade groups showed a different reaction. Those students who received counseling became more delinquency prone after the delay period, while those students who did not receive counseling made large gains toward socially acceptable behavior.

On the Acting Out Scale, also on Tables 14 and 15, the 7th grade made slight change as a result of counseling with regard to their Self-concept, while the 8th grade experimental groups made many changes in favor of counseling over the three testing periods.

On the Structured-Objective Rorschach Test, as seen on Tables 16 and 17, the 7th grade experimental group seemed to have better ego strength or Self-structure, which was relatively well maintained over the delay period, while the control group made only slight gains and these gains were lost over the delay period. The 7th grade experimental group also became less Anxious after counseling, but returned to their original scores after the delay period. The control group's Anxiety increased during the follow-up period. The experimental group, after counseling, became more Non-conforming than the control group. However, both groups had scores that improved toward the conforming end of the scale during the follow-up period.

The 8th grade scores on the SORT indicated that the experimental group became more Pedantic after counseling but this effect wore off during the delay period. The control group became more Pedantic after the counseling period and this variable continued to increase during the follow-up period. Both groups became less Conforming after the counseling period. However, the control group did not improve this Conforming behavior during the delay period, while the experimental group did.

TABLE 12

MEAN SCORES FOR 7TH GRADE EXPERIMENTAL AND CONTROL GROUPS ON THE STANFORD ACHIEVEMENT TEST, SCHOOL GRADES AND WISC

STANFORD ACHIEVEMENT	7th Experimental						7th Control					
	Pre		Post		Follow-Up		Pre		Post		Follow-Up	
	GP[1]	K[2]	GP	K	GP	K	GP	K	GP	K	GP	K
Para. Mean.	5.4	79.9	5.7	81.1	7.4	88.8	5.5	80.3	5.9	81.8	7.5	89.3
Word Mean.	6.5	78.7	7.5	83.7	7.8	85.6	6.2	77.5	7.6	84.3	7.5	83.8
Language	3.7	87.8	2.3	81.2	5.4	94.4	4.3	90.5	2.8	83.5	5.6	94.8
Arith.Reas.	6.1	75.3	6.8	79.2	7.2	81.9	6.8	79.1	7.5	84.2	7.5	84.5
Arith.Comp.	6.1	52.0	7.6	72.3	6.8	60.8	6.2	52.7	7.8	75.3	6.7	58.5
Median	6.1	77.7	6.8	80.0	7.2	85.8	6.2	78.7	7.5	82.	7.5	86.3

[1] = Grade Placement [2] = K Scores

GRADES[1]	Pre	Post	Follow-Up	Pre	Post	Follow-Up
English	442.0	418.5	428.7	409.9	443.2	415.3
Arithmetic	526.4	473.7	456.7	509.1	461.6	491.2
Soc.Studies	478.5	499.4	459.8	459.8	484.2	498.4
Science	480.0	495.0	442.7	503	489.9	485.5

[1] = Standard Scores with mean of 500

WISC	Pre	Post	Follow-Up	Pre	Post	Follow-Up
Information	11.2	12.0	12.0	11.5	11.4	11.9
Comprehension	10.1	10.2	10.2	10.7	10.1	11.3
Arithmetic	10.0	9.9	9.9	10.	10.4	11.3
Similarities	11.0	11.5	11.6	11.8	12.5	11.3
Digit Span	10.6	10.5	10.4	8.8	9.5	9.7
Pic. Comp.	10.8	12.3	12.1	11.3	12.8	12.8
Pic. Arr.	10.5	11.7	12.3	10.4	11.6	11.8
Block Design	10.0	10.8	11.4	10.6	11.2	11.8
Object Assm.	10.2	11.7	12.0	10.4	12.0	12.6
Digit Symbol	10.3	11.5	11.5	9.9	11.6	12.2
Verbal IQ	103.5	105.0	105.1	103.5	105.	106.8
Perform.IQ	102.3	111.2	113.0	103.6	112.8	115.5
Full Scale IQ	103.3	108.7	109.8	104.3	109.5	112.1

TABLE 13

MEAN SCORES FOR 8TH GRADE EXPERIMENTAL AND CONTROL GROUPS ON THE STANFORD ACHIEVEMENT TEST, SCHOOL GRADES AND WISC

STANFORD ACHIEVEMENT	8th Experimental						8th Control					
	Pre		Post		Follow-Up		Pre		Post		Follow-Up	
	GP[1]	K[2]	GP	K	GP	K	GP	K	GP	K	GP	K
Para.Mean.	5.8	81.6	6.6	85.2	7.6	89.5	6.3	83.7	6.6	85.3	8.0	91.5
Word Mean.	7.6	84.0	8.3	88.4	8.1	87.7	7.8	85.3	8.3	88.6	8.1	87.6
Language	4.3	90.04	2.8	83.2	6.0	96	5.2	93.8	3.0	84.4	5.8	95.5
Arith.Reas.	6.5	77.8	7.2	81.8	7.4	83.4	6.8	79.5	7.9	87.4	7.9	87.7
Arith.Comp.	6.5	56.2	7.7	73.7	6.4	55	6.9	62.1	8.0	78.9	7.3	68.6
Median	6.5	80.9	7.2	82.0	7.4	86.8	6.8	82.6	7.9	85.4	7.9	89

[1] = Grade Placement [2] = K Scores

GRADES[1]	Pre	Post	Follow-Up	Pre	Post	Follow-Up
English	384.6	398.4	416.8	442.3	450.8	452.5
Arithmetic	383.1	410.3	433.8	473.4	475.8	437.6
Soc.Studies	374.1	408.7	402.8	455.1	455.5	426.5
Science	404.8	427	444.4	449.6	460.5	481.7

[1] = Standard Scores with mean of 500

WISC	Pre	Post	Follow-Up	Pre	Post	Follow-Up
Information	10.3	11.3	11.5	11.7	12.0	12.3
Comprehension	10.2	10.5	10.5	10.8	11.8	10.8
Arithmetic	9.8	9.8	10.6	9.6	9.8	10.4
Similarities	10.9	11.7	11.6	11.5	12.3	11.8
Digit Span	9.7	9.9	10	9.7	9.8	9.6
Pic.Comp.	10.8	11.3	12.3	11.0	12.1	13.2
Pic.Arr.	11.1	11.8	13.3	10.9	11.3	12.1
Block Design	9.6	10.6	11.6	10.5	11.5	12.3
Object Assem.	10.3	12.0	12.7	11.2	11.8	12.2
Digit Symbol	9.3	10.3	11.3	10.5	11.8	12.6
Verbal IQ	100.9	103.8	105.4	104.3	107.2	106.1
Perform. IQ	101.5	108.4	114.3	105.9	111.8	117.3
Full Scale IQ	101.5	106.5	110.4	105.6	110.3	112.3

TABLE 14

MEAN SCORES FOR 7TH GRADE EXPERIMENTAL AND CONTROL GROUPS ON THE ACTING OUT SCALE

ACTING OUT SCALE	7th Grade Experimental			7th Grade Control		
Lower score desirable	Pre	Post	Follow-Up	Pre	Post	Follow-Up
1.	22.2	16.2	16.4	20.	15.3	15.6
2.	20.8	19.5	19.1	18.1	17.1	15.
3.	15.6	16.2	14.0	12.4	14.5	14.4
4.	12.6	16.3	13.7	11.8	11.9	12.2
5.	14.7	13.8	13.6	12.4	12.1	10.6
6.	16.2	14.2	14.	13.2	9.9	13.
7.	10.5	9.4	12.	11.4	9.8	10.5
8.	12.4	14.2	13.5	11.7	10.9	10.5
9.	12.1	13.3	14.5	14.2	12.8	12.4
10.	14.6	16.3	13.5	14.8	13.2	12.1
11.	12.5	12.8	13.	12.5	11.6	12.1
12.	14.1	12.8	11.9	12.3	9.1	11.1
13.	10.6	12.9	11.7	10.9	8.2	9.3
14.	15.3	16.1	13.9	14.6	10.8	11.8
15.	15.3	14.1	13.	14.1	12.3	11.2
16.	10.2	12.0	12.7	12.1	11.4	12.7
17.	13.1	10.2	16.8	11.4	10.8	11.8
18.	11.8	17.4	13.6	11.9	14.8	15.1
19.	13.4	15.8	13.9	11.8	12.4	11.4
20.	17.0	15.1	13.5	15.9	12.6	11.3
21.	9.5	11.4	9.8	10.	8.0	10.1
22.	14.4	10.7	11.7	13.5	11.6	10.8
23.	12.5	12.0	10.4	12.4	10.1	9.7
K D PRONENESS	22.8	19.6	18.9	21.5	19.7	17.

TABLE 15

MEAN SCORES FOR 8TH GRADE EXPERIMENTAL AND CONTROL GROUPS ON THE ACTING OUT SCALE

ACTING OUT SCALE	8TH Grade Experimental			8TH Grade Control		
Lower score desirable	Pre	Post	Follow-Up	Pre	Post	Follow-Up
1.	20.9	14.0	13.7	19.2	16.4	15.9
2.	21.4	17.3	18.1	20.6	17.8	18.1
3.	16.8	13.5	11.8	14.8	12.8	14.1
4.	14.8	13	13.4	13.4	13.8	14.5
5.	13	13.7	12.6	12.7	12.7	12.9
6.	11.5	10.2	12.1	15.8	12.3	12.6
7.	11.6	10.4	8.1	8.2	8.8	8.8
8.	13.2	11.7	13	12.0	11.2	12.5
9.	13.7	14.0	11.9	14.7	14.9	11.9
10.	14.7	8.5	11.9	17.2	13.9	12.4
11.	11.9	11.8	11.5	10.5	11.8	10.2
12.	13.8	13.2	10.9	11.3	10.7	12.8
13.	10.3	8.1	10.1	9.5	9.2	9.4
14.	13.1	10.9	10.7	13.5	13	13.5
15.	13.8	12.7	11.6	15.7	12.8	14.3
16.	12.2	10.2	11.3	11.1	14.7	14.9
17.	12.3	12.1	11	11.6	11.0	10.7
18.	12.8	14.3	13.2	10	15.3	11.9
19.	11.9	13.8	13.1	11.4	12.9	12.3
20.	15.8	11.9	12.2	13.8	15.8	13.6
21.	8.0	11.5	12.6	9.8	10.4	13.4
22.	14.1	11.7	12.7	13.5	13.7	13.8
23.	12.1	11.1	12.3	14.5	13.6	13.2
K D PRONENESS	18.8	16.6	19.4	19.2	17.5	11.5

TABLE 16

MEAN SCORES FOR 7TH GRADE EXPERIMENTAL AND CONTROL GROUPS ON THE STRUCTURED-OBJECTIVE RORSCHACH TEST

SORT T SCORES	7th Grade Experimental			7th Grade Control		
	Pre	Post	Follow-Up	Pre	Post	Follow-Up
W	38.9	34.0	40.5	35.2	33.1	39.8
D	49.6	55.4	48.9	52.8	55.8	51.1
Dd	65.3	67.0	67.1	67.9	67.8	62.3
S	53.5	51.5	55.9	54.6	52.5	52.4
F	56.8	64.2	60.5	60.7	63.	56.5
F-	59.3	62.0	59.3	58.5	59.	58.2
M	52.5	51.4	50.6	50.2	51.5	50.9
FM	47.6	47.9	45.9	49.3	48.6	45.7
FC	39.4	38.0	40.1	40.8	40.4	41.3
CF	42.7	43.3	45.3	43.3	44.4	43.7
FCh	48.3	43.1	48.9	45.8	44.	51.5
A	49.5	46.8	50.	49.4	46.8	45.
H	56.5	52.3	54.9	54.4	53.9	55.
P	32.8	24.2	31.8	29.	27.1	33.7
O	59.6	75.4	64.1	67.	69.6	59.8
W:M	91.3	85.4	91.1	85.4	84.7	90.7
D:M	102.0	106.8	99.5	103.	107.3	102.
F-:F	102.6	97.9	98.8	97.8	96.1	101.6
H:P::A	94.9	91.1	93.1	92.	93.3	99.1
F:M	109.2	115.6	111.1	110.9	114.5	107.4
FC:M	91.9	89.4	90.7	91.	92.	92.2
CF:FC	82.1	81.3	83.5	84.1	84.8	85.
FM:FC::M	98.1	96.5	99.2	96.	97.2	100.1
FM:M	104.8	103.5	104.7	100.9	103.	105.2
F::S:FCh	113.	124.1	116.0	116.1	120.	110.8
FM:F::F:M	98.5	96.9	96.8	98.3	96.3	97.9
M:FC:CF	100.6	98.4	97.8	98.8	99.3	99.3
O:P	73.2	48.8	67.7	62.	57.6	73.9

TABLE 17

MEAN SCORES FOR 8TH GRADE EXPERIMENTAL AND CONTROL GROUPS ON THE STRUCTURED-OBJECTIVE RORSCHACH TEST

SORT T SCORES	8th Grade Experimental			8th Grade Control		
	Pre	Post	Follow-Up	Pre	Post	Follow-Up
W	37.4	32.3	37.3	41.0	36.5	41.
D	54.3	55.4	53.2	51.5	52.8	47.4
Dd	63.3	69.0	63.3	62.3	66.4	68.4
S	51.8	49.3	51.2	50.7	50.0	52.6
F	57.1	58.8	56.4	56.0	57.4	59.4
F-	60.6	64.4	63.2	57.7	64.6	59.6
M	49.0	53.1	54	53.3	53.3	53.9
FM	51.1	46.8	47.5	46.5	46.3	44.3
FC	40.7	28.9	39.5	41.3	37.7	40.4
CF	45.9	43.5	44.4	46.4	43.5	43.6
FCh	45.4	43.2	45.8	49.5	47.2	44.9
A	50.3	44.1	48.2	49.4	43.5	46.2
H	51.5	53.70	53.3	50.3	52.8	53.4
P	32.4	25.1	28.8	36.9	26.9	27.7
O	63.7	72.3	67.5	56.3	68.7	69
W:M	86.5	85.4	91.2	94.3	89.8	95
D:M	103.3	108.5	107.1	104.8	106.0	101.3
F-:F	103.5	105.6	106.8	101.6	107.2	100.2
H:P::A	91.3	95.1	92.5	95.5	96.2	94.1
F:M	106.2	111.9	110.3	109.4	110.7	113.3
FC:M	89.8	92	93.4	94.7	91.	94.3
FM:FC::M	93.5	96.2	99.0	100.5	98.9	102.5
CF:FC	86.6	82.4	83.9	87.8	81.3	84.0
FM:M	96.0	106.4	106.5	106.8	107	109.6
F::S:FCh	116.2	118.3	113.6	113.0	116.1	117.0
FM:F::F:M	102.5	99.3	99.9	97	99.8	95.0
M:FC:CF	96.3	100.7	101.2	100.5	100	102.0
O:P	68.7	52.8	61.3	80.7	58.3	58.8

Teacher Effect

To measure the effect of working with teachers in discussion groups the same 96 students were used. However, for the analysis of co-variance and variance, the 96 students were grouped 8X and 8C, with 7X and 7C. The 8th grade students did not have their teachers involved in discussion groups, while the 7th grade students did. For this comparison we found that our results were confounded with a variable we had not intended to include, namely, grade. Where we had hoped to compare those students whose teachers were involved in discussion groups with those whose teachers were not, we found that we were actually comparing the teacher effect plus the fact that one group was made up of 8th grade students and the other of 7th grade students. Initially, we made the assumption that 7th and 8th grade students were alike. However, our data seems to indicate that they were not. Therefore, any interpretation made from this analysis was dependent upon at least two variables, teacher effect and grade effect. How much of either effect was applied to the variable cannot be determined.

A. Wechsler Intelligence Scale for Children

From the analysis of co-variance shown on Table 18, those students whose teachers were not involved in discussion groups made gains with regard to the Comprehension subtest. However, this improvement was not maintained, but was reversed, over the delay period. On the analysis of variance, the mean gain on the Comprehension subtest for the experimental group indicates that they regained their loss after counseling during the follow-up period. On Table 19, for the Follow-up testing, the group without teachers involved made greater gains on Picture Completion, Digit Symbol, and the Performance scale scores.

B. Stanford Achievement Test

On Table 20 for analysis of co-variance, the Paragraph Meaning subtest proved favorable for those students whose teachers were not involved in discussion groups. The mean gains, shown on Table 21, indicate that, although the Word Meaning subtest was not significant from Pre to Post testing, the Pre to Follow-up testing showed significant improvement in favor of those students whose teachers were involved in discussion groups.

C. Grades

On Table 20 the Pre to Post and Pre to Follow-up comparison of the 1st quarter grades in Social Studies indicate that the students whose teachers were involved in discussion groups improved more than those whose teachers were not involved. For the English final grades, there was improvement in favor of the control group during the Post to Follow-up period.

From the analysis of variance on Table 21, the mean gains for Science were improved as well as for Mathematics for those students whose teachers were not involved in discussion groups. However, the experimental group seemed to improve on their 4th quarter grades in Mathematics during the delay period from Post to Follow-up testing.

D. Kvaraceus Delinquency Proneness Scale

This instrument showed no significant difference between those students in the experimental group whose teachers were involved in discussion groups and those in the control group whose teachers were not so involved. Tables 18 and 19 for the analysis of co-variance and variance indicate this similarity between the two groups of students.

E. The Acting Out Scale

Most gains on this instrument, in which lower scores are more desirable, were shown by the analysis of co-variance on Table 22 which seemed to be in favor of the control group. The data indicated that the control group felt more Cooperative, and seemed to have more Self-confidence after the counseling period. During the delay period these gains tended to disappear. The control group felt they had a better Acceptance of Peers and Others during the follow-up period, where the experimental group, during the same period, seemed more strongly Motivated toward academic success and better able to Accept Authority.

On Table 23, which deals with mean gain, the same general pattern was substantiated.

F. Structured-Objective Rorschach Test

From Table 24, the data indicated that the experimental group had better Self-structure, or more ego strength, greater powers of Concentration,and was more Impulsive and Consistent than the control group after the counseling period. At the conclusion of the project, the experimental group had less Emotional control, more Anxiety, more Popular responses and fewer Original responses. The experimental group seemed to be less Flexible and more Conforming.

Looking at the analysis of variance on Table 25, the experimental group made gains in the direction of being more Impulsive, but also that of being more Cooperative after counseling. At the conclusion of the project, the experimental group had gains indicating they were less Pedantic, had more Anxiety, had more Popular, fewer Original responses, and tended to be more Conforming and more Cooperative than the control group.

TABLE 18

ANALYSIS OF CO-VARIANCE FOR TEACHER AND GRADE EFFECT SHOWING ADJUSTED MEANS AND F RATIOS - TEACHER AND NO-TEACHER GROUPS - FOR WECHSLER INTELLIGENCE SCALE FOR CHILDREN AND KVARACEUS DELINQUENCY PRONENESS RESULTS

Variable	Pre - Post			Pre - Follow-up			Post - Follow-up		
Wechsler Intelligence Scale for Children	$A\bar{X}$ T	$A\bar{X}$ NT	F Ratio	$A\bar{X}$ T	$A\bar{X}$ NT	F Ratio	$A\bar{X}$ T	$A\bar{X}$ NT	F Ratio
Information	11.54	11.80	.627	11.77	12.04	0.427	11.89	11.93	0.010
Comprehension	10.17	11.10	4.308 **	10.77	10.61	0.101	11.05	10.33	2.259
Arithmetic	10.03	9.90	0.104	10.52	10.59	0.026	10.52	10.59	0.010
Similarities	12.00	12.02	0.005	11.42	11.75	0.838	11.44	11.74	0.625
Digit Span	10.00	9.88	0.099	10.04	9.81	0.371	10.01	9.84	0.193
Picture Completion	12.49	11.78	2.298	12.43	12.75	0.389	12.24	12.95	2.097
Picture Arrangement	11.72	11.42	0.370	12.11	12.60	0.674	12.02	12.69	1.335
Block Design	10.88	11.12	0.482	11.47	12.03	2.145	11.60	11.90	0.616
Object Assembly	11.95	11.78	0.133	12.46	12.29	0.117	12.35	12.40	0.010
Digit Symbol	11.48	11.08	0.836	11.75	12.00	0.345	11.61	12.14	2.413
Verbal Intelligence	104.68	105.80	0.647	105.65	106.06	0.074	106.11	105.60	0.112
Performance Intelligence	112.28	109.80	2.032	114.65	115.53	0.304	113.59	116.50	2.662
Full Scale Intelligence	108.99	108.45	0.191	110.35	111.44	0.163	110.66	111.63	0.485
Kvaraceus Delinquency Proneness (lower score more desirable)	19.43	17.30	1.516	17.53	15.86	1.047	17.58	15.82	1.250

* = significant at .01% level
** = significant at .05% level
! = significant at .10% level

each group has an N of 48

TABLE 19

ANALYSIS OF VARIANCE FOR TEACHER AND GRADE EFFECT
SHOWING MEAN GAINS AND F RATIOS - TEACHER AND NO-TEACHER GROUPS -
FOR WECHSLER INTELLIGENCE SCALE FOR CHILDREN AND KVARACEUS DELINQUENCY PRONENESS RESULTS

Variable	Pre - Post			Pre - Follow-up			Post - Follow-up		
Wechsler Intelligence Scale for Children	$\bar{X}$ GAIN T	$\bar{X}$ GAIN NT	F Ratio	$\bar{X}$ GAIN T	$\bar{X}$ GAIN NT	F Ratio	$\bar{X}$ GAIN T	$\bar{X}$ GAIN NT	F Ratio
Information	.29	.63	.949	0.56	0.90	0.767	0.21	0.27	0.021
Comprehension	-0.25	0.63	2.499	0.35	0.13	0.126	0.50	-0.50	4.672 **
Arithmetic	0.15	0.15	0.	0.63	0.83	0.164	0.40	0.59	0.153
Similarities	0.60	0.77	0.034	0.10	0.52	0.773	-0.58	-0.25	0.512
Digit Span	0.31	0.19	0.092	0.35	0.13	0.202	0.04	-0.[illegible]	0.051
Picture Completion	1.48	0.83	1.704	1.42	1.81	0.490	-0.06	0.98	3.781 !
Picture Arrangement	1.17	0.52	1.244	1.58	1.67	0.014	0.42	1.15	1.223
Block Design	0.69	0.98	0.628	1.29	1.88	2.292	0.60	0.90	0.560
Object Assembly	1.58	1.19	0.555	2.06	1.71	0.459	0.50	0.52	0.001
Digit Symbol	1.48	1.10	0.755	1.73	2.04	0.460	0.25	0.94	3.226 !
Verbal Intelligence	1.52	2.08	0.004	2.46	3.17	0.175	0.94	0.29	0.149
Performance Intelligence	9.04	6.40	2.143	11.31	12.13	0.191	2.27	5.73	3.285 !
Full Scale Intelligence	5.33	4.83	0.148	7.19	7.63	0.173	1.85	3.00	0.600
Kvaraceus Delinquency Proneness (lower score more desirable)	-2.44	-1.94	0.059	-4.15	-3.56	0.097	-1.71	-1.83	0.002

* = significant at .01% level
** = significant at .05% level
! = significant at .10% level

each group has an N of 48

TABLE 20

ANALYSIS OF CO-VARIANCE FOR TEACHER AND GRADE EFFECT SHOWING ADJUSTED MEANS AND F RATIOS -- TEACHER AND NO-TEACHER GROUPS - FOR STANFORD ACHIEVEMENT TEST RESULTS AND GRADES

Variable	Pre-Post			Pre-Follow-up			Post-Follow-up		
Stanford Achievement Test	$A\bar{X}$ T	$A\bar{X}$ NT	F Ratio	$A\bar{X}$ T	$A\bar{X}$ NT	F Ratio	$A\bar{X}$ T	$A\bar{X}$ NT	F Ratio
Paragraph Meaning	82.08	84.62	2.777 !	90.10	89.45	0.117	90.58	88.96	0.843
Word Meaning	86.15	86.35	0.014	87.78	84.58	1.948	86.66	85.70	0.185
Language	82.45	83.66	0.624	94.11	95.76	1.374	94.82	95.45	0.682
Arithmetic Reasoning	82.02	84.27	1.824	83.70	85.07	0.376	84.35	84.42	0.001
Arithmetic Comprehension	75.02	75.06	0.000	61.73	59.73	0.264	60.64	60.82	0.002
Battery Median	82.02	82.63	0.224	87.29	86.60	0.148	87.17	86.72	0.085
Grades									
English	426.32	429.12	0.033	419.14	437.51	0.901	420.68	435.97	0.634
Final marks							400.45	447.74	9.089 *
Math	446.25	464.44	0.781	453.33	456.27	0.016	466.93	442.67	1.434
Final marks							432.20	451.32	0.991
Social Studies	475.57	448.29	3.053 !	468.90	424.83	4.781 **	462.31	431.42	2.773 !
Final marks							457.94	436.56	1.696
Science	474.71	461.50	0.553	453.64	473.57	0.633	453.68	473.52	0.727
Final marks							463.95	485.30	1.574

* = significant at .01% level
** = significant at .05% level
! = significant at .10% level

each group has an N of 48

TABLE 21

ANALYSIS OF VARIANCE FOR TEACHER AND GRADE EFFECT
SHOWING MEAN GAINS AND F RATIOS -- TEACHER AND NO-TEACHER GROUPS
FOR STANFORD ACHIEVEMENT TEST RESULTS AND GRADES

VARIABLE	PRE-POST			PRE-FOLLOW-UP			POST-FOLLOW-UP		
	$\bar{X}$GainT	$\bar{X}$GainNT	F Ratio	$\bar{X}$GainT	$\bar{X}$GainNT	F Ratio	$\bar{X}$GainT	$\bar{X}$GainNT	F Ratio
Stanford Achievement									
Paragraph Meaning	1.40	2.56	0.494	8.98	7.41	0.391	7.58	5.25	1.813
Word Meaning	5.90	3.83	1.483	6.58	3.00	2.816 !	0.69	-0.83	0.489
Language	-6.81	-8.33	0.325	4.98	3.65	0.231	11.79	11.98	0.015
Arithmetic Reasoning	4.48	5.92	0.580	6.02	6.85	0.132	1.54	0.94	0.086
Arithmetic Comprehension	21.42	17.19	1.981	7.31	2.67	1.419	-14.10	-14.52	0.013
Battery Median	2.77	1.90	0.427	7.81	6.10	0.950	5.04	4.21	0.299
Grades									
English	4.92	11.15	0.150	-3.96	21.23	1.375	-8.88	10.08	0.718
Final Marks							-27.81	29.21	10.168 *
Math	-50.10	14.79	8.671 *	-43.83	7.44	4.466**	6.27	-7.35	0.382
Final Marks							-27.85	5.50	2.966 !
Social Studies	22.63	15.35	0.204	9.92	-2.06	0.306	-12.71	-17.42	0.061
Final Marks							-9.35	-0.83	0.254
Science	0.94	16.52	0.751	-27.42	35.88	6.075**	-28.35	19.35	3.727 !
Final Marks							-7.81	29.21	4.678 **

* = significant at .01% level
** = significant at .05% level
! = significant at .10% level

Each group has an N of 48

TABLE 22

ANALYSIS OF CO-VARIANCE FOR TEACHER AND GRADE EFFECT SHOWING ADJUSTED MEANS AND F RATIOS - TEACHER AND NO-TEACHER GROUPS - FOR ACTING OUT SCALE RESULTS

Variable	Pre - Post			Pre - Follow-up			Post - Follow-up		
	$A\bar{X}$ T	$A\bar{X}$ NT	F Ratios	$A\bar{X}$ T	$A\bar{X}$ NT	F Ratios	$A\bar{X}$ T	$A\bar{X}$ NT	F Ratios
Acting-Out Scale									
1. Self Adequacy	15.52	15.46	0.002	15.83	14.94	0.554	15.87	14.90	0.779
2. Achievement	18.65	17.18	1.023	17.22	17.93	0.347	16.87	18.28	1.705
3. Cooperation	15.87	12.59	5.730 **	14.59	12.60	2.689	13.68	13.51	0.023
4. Reputation	14.44	13.06	0.950	13.35	13.54	1.025	12.72	14.17	1.886
5. Cooperation	12.80	13.31	0.148	12.02	12.81	0.569	12.16	12.67	0.314
6. Acceptance of Self	11.79	11.44	0.100	13.36	12.50	0.552	13.33	12.52	0.539
7. Acceptance of Peers	9.37	9.79	0.179	11.12	8.65	5.617 **	11.28	8.49	10.356 *
8. Acceptance of Authority	12.67	11.31	1.166	12.10	12.61	0.195	11.68	13.03	1.659
9. Acceptance of Others	13.30	14.18	0.397	13.59	11.83	2.363	13.71	11.70	3.465 !
10. Self Confidence	14.92	11.00	7.185 *	12.98	11.93	0.929	12.06	12.86	0.535
11. Acceptance of Others	12.03	11.95	0.004	12.32	11.03	1.448	12.42	10.94	2.375
12. Acceptance of Peers	10.83	12.05	1.013	11.49	11.84	0.117	11.68	11.66	0.000
13. Acceptance of Authority	10.44	8.77	2.395	10.40	9.88	0.213	10.05	10.22	0.025
14. Self Adequacy	13.07	12.33	0.288	12.60	12.35	0.058	12.56	12.39	0.033
15. Self Adequacy	13.18	12.74	0.140	12.13	12.91	0.539	12.03	13.01	1.183
16. Cooperation	11.82	12.35	0.204	12.78	12.99	0.037	12.89	12.88	0.000
17. Acceptance of Others	10.39	11.59	0.917	11.74	10.89	0.605	11.96	10.67	1.293
18. Acceptance of Authority	15.97	14.95	0.508	14.24	12.61	1.520	14.04	12.32	0.925
19. Acceptance of Authority	13.88	13.58	0.039	12.52	12.83	0.076	12.48	12.87	0.197
20. Impulsiveness	13.45	14.19	0.270	12.13	13.16	0.757	12.39	12.90	0.265
21. Motivation	9.49	11.19	1.118	9.83	13.07	4.750 **	10.08	12.81	3.599 !
22. Acceptance of Peers	11.10	12.72	1.255	11.21	13.25	2.352	11.59	12.86	1.009
23. Acceptance of Authority	11.26	12.12	0.384	10.21	12.58	3.596 !	10.33	12.46	3.211 !

* = significant at .01% level
** = significant at .05% level
! = significant at .10% level

each group has an N of 48

TABLE 23

ANALYSIS OF VARIANCE FOR TEACHER AND GRADE EFFECT SHOWING MEAN GAINS AND F RATIOS - TEACHER AND NO-TEACHER GROUPS - FOR ACTING OUT SCALE RESULTS

Variable	Pre - Post			Pre - Follow-up			Post - Follow-up		
	$\bar{X}$ GAIN T	$\bar{X}$ GAIN NT	F Ratios	$\bar{X}$ GAIN T	$\bar{X}$ GAIN NT	F Ratios	$\bar{X}$ GAIN T	$\bar{X}$ GAIN NT	F Ratios
Acting-Out Scale									
1. Self Adequacy	-5.33	-4.83	0.116	-5.10	-5.27	0.012	0.23	-0.44	0.242
2. Achievement	-1.15	-3.50	2.034	-2.44	-2.90	0.083	-1.29	0.60	1.739
3. Cooperation	1.35	-2.65	6.957 *	0.25	-2.81	3.788 !	-1.10	-0.17	0.464
4. Reputation	1.85	-0.69	2.270	0.69	-0.13	0.326	-1.17	0.56	1.995
5. Cooperation	-0.60	0.33	0.370	-1.42	-0.13	0.842	-0.81	-0.46	0.084
6. Acceptance of Self	-2.67	-2.44	0.028	-1.19	-1.29	0.004	1.48	1.15	0.064
7. Acceptance of Peers	-1.38	-0.29	0.756	0.33	-1.40	1.654	1.71	-1.10	8.619 *
8. Acceptance of Authority	0.52	-1.17	1.252	-0.04	0.13	0.014	-0.56	1.29	2.311
9. Acceptance of Others	-0.13	0.27	0.062	0.35	-2.27	2.170	0.48	-2.54	3.673 !
10. Self Confidence	0.02	-4.77	6.915 **	-1.96	-3.79	1.569	-1.98	0.98	4.559 **
11. Acceptance of Others	-0.29	0.58	0.365	0.04	-0.38	0.090	0.33	-0.96	1.437
12. Acceptance of Peers	-2.29	-0.58	1.306	-1.69	-0.73	0.406	0.60	-0.15	0.331
13. Acceptance of Authority	-0.17	-1.23	0.554	-0.23	-0.10	0.007	-0.06	1.13	0.984
14. Self Adequacy	-1.48	-1.33	0.009	-2.06	-1.19	0.409	-0.58	0.15	0.317
15. Self Adequacy	-1.52	-2.02	0.105	-2.56	-1.85	0.183	-1.04	0.17	1.150
16. Cooperation	0.58	0.79	0.023	1.54	1.44	0.007	0.96	0.65	0.091
17. Acceptance of Others	-1.79	-0.44	0.869	-0.46	-1.13	0.228	1.33	-0.69	1.839
18. Acceptance of Authority	4.27	3.38	0.349	2.50	1.08	0.827	-1.77	-2.29	0.109
19. Acceptance of Authority	1.50	1.71	0.016	0.04	1.06	0.471	-1.46	-0.65	0.433
20. Impulsiveness	-2.63	-1.00	0.968	-4.06	-1.92	1.790	-1.44	-0.92	0.175
21. Motivation	0.02	2.04	1.416	0.21	4.06	4.332 **	0.19	2.02	0.893
22. Acceptance of Peers	-2.85	-1.15	0.873	-2.75	-0.60	1.387	0.10	0.54	0.083
23. Acceptance of Authority	-1.42	-0.92	0.111	-2.38	-0.54	1.414	-0.96	0.38	0.778

* = significant at .01% level

** = significant at .05% level

! = significant at .10% level

each group has an N of 48

TABLE 24

ANALYSIS OF CO-VARIANCE FOR TEACHER AND GRADE EFFECT
SHOWING ADJUSTED MEANS AND F RATIOS - TEACHER AND NO-TEACHER GROUPS -
FOR S-O RORSCHACH RESULTS

Variable		Pre - Post			Pre - Follow-up			Post - Follow-up		
S-O Rorschach		AX̄ T	AX̄ NT	F Ratios	AX̄ T	AX̄ NT	F Ratios	AX̄ T	AX̄ NT	F Ratios
Theoretical	W	34.01	33.95	0.001	40.59	38.68	0.705	40.28	38.99	0.296
Practical	D	55.82	53.80	0.371	50.13	50.14	0.000	49.96	50.31	0.040
Pedantic	Dd	67.38	67.68	0.021	64.09	66.50	1.100	64.76	65.82	0.210
Rigidity-Persistence	S	51.79	49.86	1.360	53.88	52.18	0.811	53.99	52.07	1.032
Structuring	F	63.33	58.34	5.038 **	58.17	58.23	0.001	58.16	58.24	0.001
Concentration	F-	60.56	64.48	4.332 **	58.75	61.35	2.038	58.89	61.21	1.520
Activity Potential	M	51.46	53.23	1.285	50.74	57.95	3.317 !	50.91	53.78	2.620
	FM	48.25	46.54	1.051	45.76	45.95	0.010	45.88	45.83	0.001
	FC	39.30	38.17	0.601	40.73	39.89	0.354	40.66	39.96	0.247
	CF	44.05	43.35	0.202	44.91	43.64	0.643	44.50	44.04	0.086
Anxiety	FCh	43.65	45.10	0.608	50.01	45.28	5.155 **	50.19	45.10	5.186 **
	A	46.87	43.75	3.129 !	47.52	47.15	0.034	47.32	47.35	0.000
Human Relationships	H	52.69	53.64	0.289	54.72	53.53	0.437	54.95	53.30	0.853
Popular	P	26.09	25.66	0.063	33.20	27.80	7.447 *	32.83	28.17	6.730 **
Original	O	71.90	71.10	0.093	61.28	68.93	7.052 *	61.52	68.69	6.313 **
Induction	W:M	85.36	87.29	0.474	91.19	92.77	0.268	91.22	92.73	0.228
Deduction	D:M	107.30	107.01	0.014	100.86	104.09	1.694	100.76	104.19	1.892
Concentration or Impulsiveness	F-:F	96.97	106.40	10.234 *	100.63	103.08	0.614	100.30	103.41	0.830
Range of Interests	H:P::A	92.22	95.69	2.760	96.07	93.32	1.185	95.98	93.42	0.969
Aggressiveness	F:M	114.73	111.62	1.513	108.90	112.19	1.291	108.75	112.33	1.484
Social Responsibility	FC:M	90.76	91.41	0.085	91.51	93.80	1.325	91.46	93.85	1.391
Cooperation	CF:FC	83.61	81.26	1.423	85.72	83.45	1.132	85.12	84.05	0.257
Tact	FM:FC::M	96.85	98.96	1.128	99.62	100.75	0.271	99.54	100.84	0.355
Confidence	FM:M	103.20	106.69	2.161	104.96	108.02	1.253	105.05	107.93	1.078
Consistent	F::S:FCh	122.11	117.20	3.056 !	113.44	115.33	0.342	112.97	115.80	0.708
Moodiness	FM:F::F:M	96.64	99.57	2.357	97.41	97.40	0.000	97.57	97.24	0.022
Flexibility	M::FC:CF	98.69	100.52	0.748	98.42	101.73	2.790 !	98.64	101.50	2.008
Conformity	O:P	54.36	54.39	0.000	72.77	58.52	9.299 *	71.41	59.38	7.943 *

* = significant at .01% level/ ** = significant at .05% level/ ! = significant at .10% level/ each group has an N of 48

TABLE 25

ANALYSIS OF VARIANCE FOR TEACHER AND GRADE EFFECT
SHOWING MEAN GAINS AND F RATIOS - TEACHER AND NO-TEACHER GROUPS - FOR S-O RORSCHACH RESULTS

Variable		Pre - Post			Pre - Follow-up			Post - Follow-up		
-O Rorschach		$\bar{X}$ GAIN T	$\bar{X}$ GAIN NT	F RATIOS	$\bar{X}$ GAIN T	$\bar{X}$ GAIN NT	F Ratios	$\bar{X}$ GAIN T	$\bar{X}$ GAIN NT	F Ratios
Theoretical	W	-3.48	-4.79	0.269	3.08	-0.04	1.393	6.56	4.75	0.429
Practical	D	4.38	1.21	1.861	-1.19	-2.50	0.365	-5.56	-3.79	0.469
Pedantic	Dd	0.79	4.90	2.071	-1.88	3.08	3.555 !	-2.67	-1.81	0.099
Rigidity-Persistence	S	-2.08	-1.56	0.057	0.08	0.69	0.069	2.17	2.25	0.001
Structuring	F	4.85	1.50	1.456	-0.21	1.29	0.266	-5.06	-0.21	2.244
Concentration	F-	1.65	5.35	2.736	-0.17	2.23	1.217	-1.81	-3.13	0.272
Activity Potential	M	0.15	2.02	0.788	-0.58	2.75	1.797	-0.73	0.73	0.431
	FM	-0.21	-2.27	0.745	-2.65	-2.92	0.009	-2.44	-0.65	0.471
	FC	-0.94	-2.73	1.066	0.58	-1.10	0.819	1.52	1.63	0.003
	CF	0.90	-2.63	2.743	1.54	-2.13	3.378 !	0.65	0.50	0.005
Anxiety	FCh	-3.46	-2.25	0.315	2.96	-2.13	3.771 !	6.42	0.13	6.267 **
	A	-2.60	-6.06	2.329	-1.96	-2.67	0.084	0.65	3.40	1.146
Human Relationships	H	-2.35	0.92	2.331	-0.48	0.96	0.398	1.88	0.04	0.591
Popular	P	-5.21	-8.60	2.251	1.83	-6.40	11.606 *	7.04	2.21	5.949 **
Original	O	9.21	10.50	0.169	-1.33	8.25	8.433 *	-10.54	-2.25	6.596 **
Induction	W:M	-3.33	-2.77	0.023	2.50	2.71	0.003	5.83	5.48	0.009
Deduction	D:M	4.52	3.23	0.177	-1.77	0.17	0.316	-6.29	-3.06	0.914
Concentration or Impulsiveness	F-:F	-3.21	3.85	3.349 !	0.04	0.94	0.066	3.25	-2.92	2.056
Range of Interests	H:P::A	-1.25	2.31	1.498	2.60	-0.06	0.747	3.85	-2.38	3.415 !
Aggressiveness	F:M	5.00	3.52	0.227	-0.79	4.04	2.087	-5.79	0.52	3.332 !
Social Responsibility	FC:M	-0.79	-0.71	0.001	-0.	1.65	0.303	0.79	2.35	0.263
Cooperation	CF:FC	-0.04	-5.35	4.828 **	2.13	-3.23	4.295 **	2.17	2.13	0.000
Tact	FM:FC::M	-0.17	1.92	0.475	2.60	3.71	0.111	2.77	1.79	0.104
Confidence	FM:M	0.35	4.29	1.312	2.06	5.67	0.787	1.71	1.38	0.009
Consistent	F::S:FCh	7.52	2.58	1.940	-1.15	0.71	0.251	-8.67	-1.88	2.813 !
Moodiness	FM:F::F:M	-1.77	-0.19	0.367	-1.04	-2.31	0.208	0.73	-2.13	1.090
Flexibility	M::FC:CF	-0.85	1.96	0.982	-1.17	3.21	2.341	-0.31	1.25	0.321
Conformity	O:P	-14.42	-19.10	0.858	3.17	-14.65	12.055 *	17.58	4.46	7.807 *

* = significant at .01% level/ ** = significant at .05% level/ ! = significant at .10% level/ each group has an N of 48

Teacher - Counselor Interactions

Table 26 shows the significant interactions of the treatment variables of counseling and teacher/grade. Because these interactions were significant, any inferences or interpretations made concerning these variables must take into account the dependent relationship of both treatments. To compound the problem, the teacher/grade effect cannot be separated. Any significant difference that seemed to be due to counseling on those variables with significant interactions must also be considered in light of the fact that teachers were or were not involved in discussion groups, or the students were 7th or 8th graders.

TABLE NO. 26

TEACHER-COUNSELOR (AB) INTERACTION EFFECT

F RATIOS

* = .01
** = .05
! = .10

	CO VARIANCE (adjusted means)			VARIANCE (mean gain)		
	Pre to Post	Pre to Follow-up	Post to Follow-up	Pre to Post	Pre to Follow-Up	Post to Follow-up
WISC						
Comprehension						3.993**
Arithmetic		2.706!				
Digit Span					3.416!	
Obj. Assembly					2.811!	
STANFORD						
Arithmetic Comprehension			3.816!			
SORT						
D-Practical		4.078**	5.054**			
Dd-Pedantic		6.044**	5.438**		6.587**	5.988**
F-Structuring		2.849!			4.190**	
FCh-Anxiety					4.087**	
P-Popular				4.442**	5.463**	
O-Original		3.978**		7.233*	9.647*	
COMBINED SORT						
D:M-Deduction		3.847**				
F:F-Concentration & Impulsiveness		2.802!			3.087!	
H:P:A-Range of Interests					3.474!	
FM:M-Confidence				2.900!		
F::S:FCh-Consistent		2.751!			4.082**	
O:P-Conformity		3.973**		6.837**	9.601**	

TABLE NO. 26 (con't)

TEACHER-COUNSELOR (AB) INTERACTION EFFECT
F RATIOS

* = .01
** = .05
! = .10

	CO VARIANCE (adjusted means)			VARIANCE (mean gain)		
	Pre to Post	Pre to Follow-up	Post to Follow-up	Pre to Post	Pre to Follow-up	Post to Follow-up
ACTING OUT SCALE						
Reputation				2.989*		
Acceptance of Self					3.521!	3.572!
Acceptance of Peers					5.919**	4.635**
Self Confidence	7.254*			2.863!		5.788**
Accept Authority (13)	8.125*			5.799**		
Self Adequacy (14)	6.574**	4.972**		4.368**		
" " (15)		3.706!	3.960**			
Cooperation	7.044*	5.045**		8.900*	6.905**	
Accept Authority (18)	3.719!		3.039!	4.650**		4.065**
Impulsiveness	5.764**	2.901!		4.818**		
KD		4.214**	4.109**		4.278**	
GRADES						
English				3.710!		
Math		3.346!	3.323!		8.132*	6.023**
Math Final						4.485**
Social Studies					6.497**	4.065**
Social Studies Final						6.224**

Summary of Results

From Tables 27 and 28, a summary of the analysis of co-variance and variance, it is seen the counseled groups differed significantly from the non-counseled groups on certain variables.

By looking at the analysis of co-variance first on Table 27, the counseled groups after counseling had more general Information as shown by the WISC; but made poorer scores on Arithmetic Reasoning on the Stanford Achievement Test; poorer grades in English than those students who did not receive counseling. The experimental group was more Original, less Conforming, less Accepting of Peers, and more poorly Motivated toward school work compared to their counterparts in the control group. In other words, when the experimental groups were tested directly after receiving counseling, their academic achievement, as shown by academic tests and grade, did not change or they became significantly worse. However, they were able to score higher on the general Information section of the WISC. After counseling they tended to be more Non-conforming or more Original in their thinking and became more aware of their difficulty in getting along with their peers and their ability to cope with the school situation.

After a year's delay period, practically all gains or losses, as shown in the Post testing, disappeared. There were no differences in grades or achievement test results and only the Digit Symbol subtest of the WISC was significant -- and this in favor of the non-counseled group. Although the counseled students felt more Cooperative with Others after the delay period, there was a tendency to be more Delinquency Prone.

In studying the mean gain on Table 28, very much the same picture appeared. The only additional item of significance was that of Self-adequacy. The counseled group gained in their feeling of Self-adequacy over the control group -- this variable had to do with their self-concept of their intelligence.

TABLE 27

SUMMARY OF ADJUSTED MEANS OF ANALYSIS OF CO-VARIANCE FOR THOSE VARIABLES THAT REACHED SIGNIFICANCE FOR COUNSELOR AND TEACHER GROUPS AND INTERACTIONS (AB)

	PRE TO POST							PRE TO FOLLOW UP							POST TO FOLLOW UP						
VARIABLE	C--NC		SIG	T-NT		SIG	AB	C--NC		SIG	T--NT		SIG	AB	C--NC		SIG	T--NT		SIG	AB
WISC																					
Info.	11.97	11.36	!																		
Comp.				10.17	11.10	**															
Dig.Sym.								11.50	12.25	!											
KD								19.11	14.29	*				**	19.24	14.15	*				**
SORT																					
F Structure				63.33	58.34	**								!							
F- Concentration				60.56	64.48	**															
FCh Anxiety											50.01	45.28	**					50.19	45.10	**	
P Popular											33.20	27.80	*					32.83	28.17	**	
O Original	73.87	69.13	!								61.28	68.93	*	**				61.52	68.69	**	
F-:F Concentrate or Impulsive				96.97	106.40	*								!							
F::S:FCh Consistent				122.11	117.20	!								!							
M::FC:CF Flexibility											98.42	101.73	!								
O:P Conformity	50.90	57.85	!								72.77	58.52	*	**				71.41	59.38	*	

* = .01
** = .05
! = .10

C = Counseled group
NC= Not Counseled

T = Teacher discussion group
NT= Teachers Not in discussion group

TABLE 27 (con't)

SUMMARY OF ADJUSTED MEANS OF ANALYSIS OF CO-VARIANCE FOR THOSE VARIABLES THAT REACHED SIGNIFICANCE FOR COUNSELOR AND TEACHER GROUPS AND INTERACTIONS (AB)

	PRE TO POST							PRE TO FOLLOW UP							POST TO FOLLOW UP						
VARIABLE	C--NC		SIG	T--NT		SIG	AB	C--NC		SIG	T--NT		SIG	AB	C--NC		SIG	T--NT		SIG	AB
ACTING OUT SCALE																					
3 Coop				15.87	12.59	**		12.40	14.79	!					12.60	14.58	!				
7 Acc Peers											11.12	8.65	**								
9 Acc Others																		11.28	8.49	*	
10 Self-conf				14.92	11.00	*	*											13.71	11.70	!	
12 Peers	12.69	10.19	**																		
21 Motiv	11.81	8.88	!								9.83	13.07	**					10.08	12.81	!	
23 Acc Authority											10.21	12.58	!					10.33	12.46	!	
STANFORD																					
Para				82.08	84.62	!															
Word																					
Arith																					
reas	81.14	85.16	**																		
GRADES																					
English	413.10	442.34	!																		
Eng Fin																		400.45	447.74	*	
Soc St				475.57	448.29	!					468.90	424.83	**					462.31	431.42	!	

TABLE 28

SUMMARY OF MEAN GAINS OF ANALYSIS OF VARIANCE FOR THOSE VARIABLES THAT REACHED SIGNIFICANCE FOR COUNSELOR AND TEACHER GROUPS AND INTERACTIONS (AB)

	PRE TO POST							PRE TO FOLLOW UP							POST TO FOLLOW UP						
VARIABLE	C--NC		SIG	T--NT		SIG	AB	C--NC		SIG	T--NT		SIG	AB	C--NC		SIG	T--NT		SIG	AB
WISC																					
Info.	.83	.08	**																		
Comp.																		0.60	- 0.50	**	**
Simil.								0.69	- 0.06	!											
Pic.Comp.																		- 0.06	0.98	!	
Dig.Sym.																		0.25	0.94	!	
Perform. IQ																		2.27	5.73	!	
KD								- 1.60	- 6.10	**				**	1.06	- 4.40	*				
SORT																					
Dd Pedantic											- 1.88	3.08	!								
CF											1.54	-2.13	!								
FCh Anxiety											2.96	-2.13	!	**	6.42	0.13	**				
P Popular							**				1.83	-6.40	*	**				7.04	2.21	**	
O Original							*				-1.33	8.25	*	*				-10.54	-2.25	**	
F-:F Concentrate or Impulsive				- 3.21	- 3.85	!								!							
H:P::A Range of Interests														!				3.85	-2.38	!	
F:M Aggressiveness																		-5.79	0.52	!	
CF:FC Cooperation				- 0.04	- 5.35	**					2.13	-3.23	**								
F::S:FCh Consistent														**				-8.67	-1.88	!	
O:P Conformity							**				3.17	-14.65	*	**				17.58	4.46	*	

* = .01
** = .05
! = .10

C = Counseled group
NC= Not counseled

T = Teacher discussion group
NT= Teachers Not in discussion group

TABLE 28 (con't)

SUMMARY OF MEAN GAINS OF ANALYSIS OF VARIANCE FOR THOSE VARIABLES THAT REACHED SIGNIFICANCE FOR COUNSELOR AND TEACHER GROUPS AND INTERACTIONS (AB)

VARIABLE	PRE TO POST							PRE TO FOLLOW UP							POST TO FOLLOW UP						
	C--NC		SIG	T--NT		SIG	AB	C--NC		SIG	T--NT		SIG	AB	C--NC		SIG	T--NT		SIG	AB
ACTING OUT SCALE																					
1 Self Ad	-6.44	-3.73	!					-6.52	-3.85	!											
3 Cooperation				1.35	-2.65	*		-3.25	0.69	**	0.25	-2.81	!		-1.94	0.67	!				
7 Accep Peers														**				1.71	-1.10	*	**
9 Accep Others																		0.48	-2.54	!	
10 Self Confidence				0.02	-4.77	**	!											-1.98	0.98	**	**
12 Accep Peers								-2.56	0.15	!					-1.58	2.04	*				
21 Motivation	2.73	-0.67	**								0.21	4.06	**								
STANFORD																					
Word											6.58	3.00	!								
GRADES																					
Eng Final							!											-27.81	29.29	*	
Math				-50.10	14.79	*					-43.83	7.44	**	*							
Math Final																		-27.85	5.50	!	**
Science											-27.42	35.88	**					-28.35	19.35	!	

Group Comparisons

In the Objectives section, question 3 had to do with comparing those students who received counseling with those students who did not receive counseling but whose teachers were involved in discussion groups. Question 4 involved comparing those students whose teachers were involved in discussion groups with the independent variable counseling-versus-no-counseling. More specifically stated, question 3 involved a comparison between an 8th grade experimental group with a 7th grade control group; question 4 compared a 7th grade experimental group with a 7th grade control group.

Because of our statistical design no comparison was made between individual groups. Therefore, the 8th grade experimental group was not compared to the 7th grade control group. The "t" test could have been used to compare means for these two groups but it was decided that this comparison would offer us no specific information because of our inability to differentiate between the effect of 8th graders compared with 7th graders whose teachers were involved in discussion groups. The information is available to those who wish to make this analysis, however. Tables 12 through 17 offer the results for each specific group in the study for all three testing periods.

For the comparison between the 7th grade experimental group with the 7th grade control group, which allows an examination of the independent variable of involving teachers in discussion groups, we refer the reader to Tables 12, 14, and 16. These comparisons are descriptively included in our preceding discussion of Mean Trends of Counselor Effect.

Counselor Effect On Teachers

To evaluate the effects of involving teachers in discussion groups, three instruments were used -- the Survey of Interpersonal Values, the Minnesota Teacher Attitude Inventory, and the Combs Apperception Test for Schools.

The Survey of Interpersonal Values has 6 scores indicating the value system of an individual or a group. From the analysis of co-variance shown on Table 29, teachers involved in discussion groups had a significantly higher score for the Independence variable after the experimental period than did those teachers who were not so involved. This difference was maintained through the follow-up period. The same is shown on Table 30.

Although the above was not supported by significant gains on Table 30, it is interesting to note that the experimental group of teachers lost more of their need for Support over the follow-up period than did the control group. The same was true for their need to Conform. Also, during the waiting period, the experimental group of teachers felt Leadership was a more important value to them than it was to those teachers not involved in discussion groups.

On the Minnesota Teacher Attitude Inventory the experimental teachers did show a gain on the Pre to Follow-up test analysis. The actual mean gain did not quite reach the .10 per cent level, but certainly showed a favorable trend for those teachers who were involved in discussion groups.

On the Combs Apperception Test for Schools, Tables 31 and 32, very little was found significant. There seem to be no major differences between the experimental and control groups. At the .10 per cent level the control group of teachers had more positive statements about adults than did the experimental teachers, when comparing their Pre and Follow-up descriptions on this test. On Table 32 there were fewer negative and more positive responses about adults with the control teachers than with the experimental group of teachers.

TABLE 29

ANALYSIS OF CO-VARIANCE FOR TEACHER DISCUSSION GROUP EFFECT
SHOWING ADJUSTED MEANS AND F RATIOS FOR THE STUDY OF
INTERPERSONAL VALUES AND MINNESOTA TEACHER ATTITUDE INVENTORY RESULTS

VARIABLE	PRE-POST			PRE-FOLLOW-UP			POST-FOLLOW-UP		
Study of Interpersonal Values	A$\bar{X}$DG	A$\bar{X}$NDG	F RATIO	A$\bar{X}$DG	A$\bar{X}$NDG	F RATIO	A$\bar{X}$DG	A$\bar{X}$NDG	F RATIO
Support	16.17	15.90	0.047	13.36	15.51	2.162	13.24	15.62	2.399
Conformity	14.91	15.62	0.151	13.09	13.98	0.250	13.51	13.56	0.001
Recognition	8.73	7.87	0.492	8.03	9.04	0.649	7.74	9.33	2.370
Independence	19.36	16.31	3.198 !	23.72	19.54	4.909 **	22.67	20.60	1.806
Benevolence	18.14	19.60	0.975	16.38	17.56	0.387	16.81	17.13	0.035
Leadership	12.89	13.91	0.232	15.47	14.40	0.366	15.68	14.19	0.538
Minnesota Teacher Attitude	39.26	32.94	3.154	45.62	34.91	3.192 !	42.98	37.55	0.853

* = significant at .01 level
** = significant at .05 level
! = significant at .10 level

DG = Discussion Group
NDG = No Discussion Group

TABLE 30

ANALYSIS OF VARIANCE FOR TEACHER DISCUSSION GROUP EFFECT SHOWING MEAN GAIN AND F RATIOS FOR THE STUDY OF INTERPERSONAL VALUES AND MINNESOTA TEACHER ATTITUDE RESULTS

VARIABLE	PRE-POST			PRE-FOLLOW UP			POST-FOLLOW UP		
Study of Inter. Values	X gain DG	X gain NDG	F Ratio	X gain DG	X gain NDG	F Ratio	X gain DG	X gain NDG	F Ratio
Support	-0.27	-0.53	0.047	-3.07	-0.93	2.212	-2.80	-0.40	2.185
Conformity	-1.73	-0.60	0.406	-3.80	-2.00	0.919	-2.07	-1.40	0.117
Recognition	-0.80	-1.80	0.723	-1.27	-0.87	0.093	-0.47	0.93	1.345
Independence	2.13	-1.27	4.264 **	6.87	1.60	6.908 **	4.73	2.87	1.150
Benevolence	-0.33	1.47	1.471	-2.33	-0.33	0.933	-2.00	-1.80	0.011
Leadership	1.33	2.33	0.227	3.93	2.80	0.368	2.60	0.47	0.710
Minn. Teacher Attitude	1.67	-4.73	3.433	7.80	-2.53	3.140	6.13	2.20	0.481

* = significant at .01 level
** = significant at .05 level
! = significant at .10 level

DG = Discussion Group
NDG = No Discussion Group

TABLE 31

ANALYSIS OF CO-VARIANCE FOR TEACHER DISCUSSION GROUP EFFECT SHOWING ADJUSTED MEANS AND F RATIOS FOR THE COMBS APPERCEPTION TEST FOR SCHOOL

VARIABLE	PRE TO POST			PRE TO FOLLOW UP			POST TO FOLLOW UP		
CATS RESPONSES	AXDG	AXNDG	F RATIO	AXDG	AXNDG	F RATIO	AXDG	AXNDG	F RATIO
Adult Positive	3.36	4.24	0.924	3.30	5.50	3.937 !	3.84	4.96	1.020
Adult Negative	5.58	4.42	1.626	4.74	3.86	0.482	4.35	4.25	0.011
Adult Neutral	2.10	1.70	0.901	1.84	1.63	0.251	1.85	1.62	0.181
Adult Total	11.15	10.25	0.792	10.35	10.52	0.033	9.96	10.90	1.164
Child Positive	2.76	2.98	0.058	4.14	4.26	0.011	4.52	3.88	0.365
Child Negative	7.75	7.31	0.145	7.21	8.12	0.397	6.86	8.47	1.360
Child Neutral	1.67	1.60	0.012	1.51	1.56	0.005	1.48	1.59	0.026
Child Total	11.94	12.12	0.027	12.90	13.90	0.305	12.98	13.82	0.315
Total Positive	5.96	7.37	0.773	6.07	9.07	2.695	7.09	8.04	0.419
Total Negative	13.46	11.60	1.206	11.28	10.52	0.149	10.16	11.64	0.678
Total Neutral	3.74	3.33	0.273	3.14	2.80	0.177	3.11	2.82	0.090
Grand Total	23.19	22.28	0.351	20.76	22.04	0.510	20.30	22.50	1.985

* = significant at .01% level
** = significant at .05% level
! = significant at .10% level

DG = Discussion Group
NDG = No Discussion Group

TABLE 32

ANALYSIS OF VARIANCE FOR TEACHER DISCUSSION GROUP EFFECT SHOWING MEAN GAINS AND F RATIOS FOR THE COMBS APPERCEPTION TEST FOR SCHOOL

VARIABLE	PRE TO POST			PRE TO FOLLOW UP			POST TO FOLLOW UP		
CATS RESPONSES	A$\bar{X}$DG	A$\bar{X}$NDG	F RATIO	A$\bar{X}$DG	A$\bar{X}$NDG	F RATIO	A$\bar{X}$DG	A$\bar{X}$NDG	F RATIO
Adult Positive	-2.27	-0.47	2.292	-2.13	0.60	5.594**	0.13	1.07	0.682
Adult Negative	-2.20	-4.80	6.556**	-2.73	-5.67	4.232**	-0.53	-0.87	0.129
Adult Neutral	-0.73	-0.73	0.0	-0.93	-0.87	0.019	-0.20	-0.13	0.015
Adult Total	-5.20	-6.00	0.692	-5.80	-5.93	0.020	-0.60	0.07	0.419
Child Positive	-2.53	-1.07	1.313	-0.87	-0.07	0.409	1.67	1.00	0.402
Child Negative	0.40	-0.67	0.732	-0.20	0.20	0.076	-0.60	0.87	1.111
Child Neutral	-1.33	-1.53	0.069	-1.47	-1.60	0.023	-0.13	-0.07	0.005
Child Total	-3.47	-3.27	0.036	-2.53	-1.47	0.362	0.93	1.80	0.352
Total Positive	-4.80	-1.53	2.666	-4.23	-0.20	4.754**	0.47	1.33	0.361
Total Negative	-1.80	-5.47	4.144!	-4.00	-6.53	1.585	-2.20	-1.07	0.392
Total Neutral	-2.07	-2.27	0.042	-2.67	-2.80	0.019	-0.60	-0.53	0.004
Grand Total	-8.67	-9.27	0.155	-11.00	-9.60	0.647	-2.33	-0.33	1.576

* = significant at .01 level
** = significant at .05 level
! = significant at .10 level

DG = Discussion Group
NDG - No Discussion Group

Topics Discussed By Experimental Groups

The information for this section was accumulated from staff meetings held by the counselors to discuss their previous group counseling meeting. The counselors were all surprised to find that these students, regardless of school, grade, or group talked about very similar topics, notably in the same order and magnitude. The differences between the groups could be described in the amount of "testing" they thought it was necessary to complete before they could establish proper rapport for the group process. Once this rapport was established the group went on to more personal topics involving more emotional content.

Among the topics discussed, in the order of presentation, were the following:

A. The students first talked about their teachers and the school program in general. As they became more confident in the group process they began to talk about specific teachers and the activities which seemed to disturb them most. At every opportunity they would talk about topics which would give them status in the group. They described and discussed situations showing resentment of authority.

B. Interspersed in their discussion about school and authority figures were the topics related to their educational future. These topics usually referred to their inability or inadequacy with reference to a future goal in line with their aspiration levels.

C. After the groups gained confidence in the counselor and the other members, they began talking about their parents and their inability to communicate their feelings to others.

D. Closely associated to their problem with their parents were their problems with siblings and peers. These students felt they had lost the battle for their parent's approval and chose a more negative role which, at least, would win them attention.

E. It was obvious from most of the topics discussed that these students lacked an adequate self-concept and felt quite insecure in their ability to handle social situations as well as those situations related to the home. They continually asked for assurance from the counselor by positively requesting it or negatively acting-out so that limits had to be set. They often requested the counselor to restructure the purpose of the group and outline possible goals.

F. Midway through the counseling sessions (session 13) the group began to work with new or different approaches for solving their problems with teachers and parents, siblings and peers. Those who could, experimented with the idea of attempting new situations to enhance their self-concept.

A more detailed description of the topics discussed in the group counseling sessions is found in Appendix D.

Roles Played During Counseling Sessions by Students & Counselors

Table 33 is a summary of the frequency of responses for the students and the counselors in the six counseled groups.

School III had two groups with a relatively high frequency of responses by the students and an average number of responses by the counselor. Grade 7 had very few interactions while grade 8 had considerably more, but still less than the four groups in the other schools. When we look at the percentage of roles played, School III spent more than 75 per cent of their time just gaining or giving information or opinions. Less than 10 per cent of their time was spent in playing Positive roles which contributed to the movement of the group, and about 17 per cent of their time was spent in playing Negative roles. When this school is compared to the other two schools it appears these groups had relatively little movement either in a Positive or a Negative direction. It was seen from the frequency of roles played that these groups participated in group counseling but did not react to the technique or the process.

In School II the 7th grade differed considerably from the 8th grade, both in the frequency of responses by the students and counselor and in the percentages of Negative roles played. The 8th grade had what might be termed a typical number of responses by the students and counselor and a typical number of interactions. However, they spent 50 per cent of their time gaining or giving Information and Opinions, only 8 per cent of their time in playing Positive roles and almost 40 percent of their time either reacting against group counseling or expressing Negative feelings. The 7th grade group seemed to require more of the counselor's time and involvement with fewer student responses. Here, approximately 70 per cent of the time was spent gaining or giving Information, 10 per cent playing Positive roles and 21 per cent of the time playing Negative roles. School II, when compared with the other schools, seemed to have all students involved in the group process with the 8th grade reacting more than the 7th grade.

In School I both 7th and 8th grade groups spent approximately 50 per cent of their time gaining and giving Information, with grade 7 spending approximately 25 per cent of the time reacting either Positively or Negatively to the counseling procedure. The 8th grade spent slightly more than 25 per cent reacting Positively and about 17 per cent reacting Negatively. It would seem that School I had groups that not only participated in group counseling but reacted well to the counseling relationship.

When rank order correlations were calculated for each school, and the 7th grade was compared with the 8th grade as to frequency of roles played by students and counselors, each school and each counselor reacted similarly for both 7th and 8th grades.

From the above analysis it would seem that School I had more productive groups than Schools II or III. However, the high frequency of Negative responses for the 8th grade in School II might be a greater contributing factor to growth than the relatively low frequency of Negative responses portrayed by the 8th grade in School I. Certainly it would seem that the former expressed a great deal more hostility in their groups, which could very well have resulted in better adjustment to the school environment. The Positive roles demonstrated by School I in both 7th and 8th grades could have been an attempt to comply with the wishes of the counselor and gain his approval.

Table 34 describes the total frequency of responses for all 7th grade groups as compared to the frequency of responses for all 8th grade groups. The relationships between the roles played by these groups was .89 using the Spearman Rank Difference Correlation and was significant at the .001 per cent level. Although the 8th grade groups had approximately 2,000 more roles played, the rank order was approximately the same. It is also interesting to note that the 8th grade had over 200 more interactions than the 7th grade. At our staff meetings during the year one could have predicted this difference well in advance. The 8th grade seemed much more involved in the counseling process while the 7th grade groups tended to be more submissive.

Tables 35 through 40 describe each counseled group in detail with regard to frequency of roles played by students and by counselors.

Tables 41, 42, and 43 describe the individual members in each group, their frequency of Informative, Positive, and Negative roles, along with the Progress Ratio initially described in the article by Cohn, Ohlsen and Proff. The Progress Ratio is determined by dividing the frequency of Positive roles by the sum of the Positive and Negative roles played. The counselors agreed that the rank order of their groups fairly represented those students who improved most and those who improved least.

To determine the relationship between counselors working in three different schools with six different groups, a Spearman Rank Difference Correlation was calculated between Counselor 1, Counselor 2, and Counselor 3. Table 44 shows the rho's which were all significant at the .01 per cent level or better. Although the counselors correlated well with each other when working with 7th grade students, correlations were not as high when working with 8th grade pupils.

TABLE 33

DESCRIPTION OF FREQUENCY AND PERCENTAGE OF ROLES PLAYED BY STUDENTS AND COUNSELORS

	SCHOOL I		SCHOOL II		SCHOOL III	
	Grade 7	Grade 8	Grade 7	Grade 8	Grade 7	Grade 8
Frequency of Student Responses	3026	4238	3096	4648	5854	4522
Frequency of Counselor Responses	1131	1011	2000	1493	945	1265
Interactions	138	220	136	195	19	91
Percentage of Roles						
Informative	51.6	55.7	69.2	53.1	75.0	78.4
Positive	24.4	27.4	9.8	8.1	8.1	4.6
Negative	24.1	16.3	21.1	39.1	16.8	16.5
Comparison of 7th with 8th Grade (Rho's)						
Student Roles	.83		.93		.90	
Counselors' Roles	.74		.90		.94	

TABLE 34

FREQUENCY AND PERCENTAGE OF THE ROLES PLAYED BY 7th AND 8th GRADES COMBINED

	7th Grade		8th Grade	
Students	Frequency	Percentage	Frequency	Percentage
Informative				
1. Information Seeker	519	4.5	777	5.8
2. Opinion Seeker	135	1.2	355	2.6
3. Information Giver	3021	26.1	3994	29.8
4. Opinion Giver	4145	35.8	3275	24.4
Positive				
5. Structurer	64	.6	150	1.1
6. Role Player	259	2.2	244	1.8
7. Initiator	77	.7	95	.7
8. Clarifier	176	1.5	193	1.4
9. Interpreter	140	1.2	77	.6
10. Reflector	17	.1	94	.7
11. Evaluator	262	2.3	350	2.6
12. Expediter	44	.4	81	.6
13. Supporter	454	3.9	463	3.5
Negative				
14. Passive Resister	201	1.7	387	2.9
15. Pollyanna	58	.5	76	.6
16. Blocker	266	2.3	494	3.7
17. Aggressor	1132	9.8	1456	10.9
18. Recognition	365	3.2	720	5.4
19. Help Seeker	33	.3	43	.3
20. Dominator	204	1.8	82	.6
TOTALS	11572	100.1	13406	100.0
Interactions	293		506	

TABLE 35

FREQUENCY AND PERCENTAGE OF THE ROLES PLAYED BY THE COUNSELOR AND STUDENTS FOR SCHOOL I - Grade 7

Roles	Students Frequency	Students Percentage	Counselor Frequency	Counselor Percentage
Informative				
1. Information Seeker	199	6.6	121	10.7
2. Opinion Seeker	20	.7	100	8.8
3. Information Giver	780	25.8	112	9.9
4. Opinion Giver	560	18.5	20	1.8
Positive				
5. Structurer	51	1.7	147	13.0
6. Role Player	41	1.4	10	.9
7. Initiator	26	.9	99	8.8
8. Clarifier	109	3.6	135	11.9
9. Interpreter	57	1.9	74	6.5
10. Reflector	4	.1	126	11.1
11. Evaluator	203	6.7	48	4.2
12. Expediter	15	.5	30	2.7
13. Supporter	230	7.6	98	8.7
Negative				
14. Passive Resister	37	1.2		
15. Pollyanna	34	1.1		
16. Blocker	160	5.3		
17. Aggressor	475	15.7	6	.5
18. Recognition Seeker	15	.5		
19. Help Seeker	6	.2		
20. Dominator	4	.1	5	.4
Total	3026	100.1	1131	99.9
Interaction	138			

TABLE 36

FREQUENCY AND PERCENTAGE OF THE ROLES PLAYED BY THE COUNSELOR AND STUDENTS FOR SCHOOL I - Grade 8

	Students		Counselor	
Roles	Frequency	Percentage	Frequency	Percentage
Informative				
1. Information Seeker	277	6.5	104	10.3
2. Opinion Seeker	214	5.0	87	8.6
3. Information Giver	821	19.4	133	13.2
4. Opinion Giver	1051	24.8	147	14.5
Positive				
5. Structurer	142	3.4	48	4.7
6. Role Player	125	2.5	36	3.6
7. Initiator	59	1.4	60	5.9
8. Clarifier	168	4.0	85	8.4
9. Interpreter	41	1.0	30	3.0
10. Reflector	91	2.1	69	6.8
11. Evaluator	255	6.0	70	6.9
12. Expediter	25	.6	10	1.0
13. Supporter	273	6.4	59	5.8
Negative				
14. Passive Resistor	112	2.6	22	2.2
15. Pollyanna	5	.1	2	.2
16. Blocker	112	2.6	7	.7
17. Aggressor	424	10.0	42	4.2
18. Recognition Seeker	21	.5		
19. Help Seeker	17	.4		
20. Dominator	5	.1		
Total	4238	99.4	1011	100.0
Interaction	220			

TABLE 37

FREQUENCY AND PERCENTAGE OF THE ROLES PLAYED BY THE COUNSELOR AND STUDENTS FOR SCHOOL II - Grade 7

	Students		Counselor	
Roles	Frequency	Percentage	Frequency	Percentage
Informative				
1. Information Seeker	191	6.2	320	16.0
2. Opinion Seeker	28	.9	396	19.8
3. Information Giver	1114	36.0	193	9.7
4. Opinion Giver	809	26.1	50	2.5
Positive				
5. Structurer	5	.2	71	3.6
6. Role Player	133	4.3	106	5.3
7. Initiator	5	.2	40	2.0
8. Clarifier	3	.1	181	9.1
9. Interpreter	32	1.0	73	3.7
10. Reflector	7	.2	300	15.0
11. Evaluator	35	1.1	24	1.2
12. Expediter	3	.1	118	5.9
13. Supporter	79	2.6	37	1.9
Negative				
14. Passive Resister	75	2.4	1	.1
15. Pollyanna	14	.5		
16. Blocker	38	1.2	2	.1
17. Aggressor	383	12.4	24	1.2
18. Recognition Seeker	87	2.8	1	.1
19. Help Seeker	27	.9		
20. Dominator	28	.9	63	3.2
Total	3096	100.1	2000	99.4
Interaction	136			

TABLE 38

FREQUENCY AND PERCENTAGE OF THE ROLES PLAYED BY THE COUNSELOR AND STUDENTS FOR SCHOOL II - Grade 8

	Students		Counselor	
Roles	Frequency	Percentage	Frequency	Percentage
Informative				
1. Information Seeker	278	6.0	271	18.2
2. Opinion Seeker	61	1.3	232	15.5
3. Information Giver	1510	32.5	167	11.2
4. Opinion Giver	616	13.3	13	.9
Positive				
5. Structurer	8	.2	86	5.8
6. Role Player	96	2.1	16	1.1
7. Initiator	8	.2	46	3.1
8. Clarifier	7	.2	165	11.1
9. Interpreter	28	.6	48	3.2
10. Reflector	3	.1	197	13.2
11. Evaluator	91	2.0	26	1.7
12. Expediter	26	.6	70	4.7
13. Supporter	97	2.1	24	1.6
Negative				
14. Passive Resister	128	2.8	1	.1
15. Pollyanna	55	1.2		0
16. Blocker	239	5.1	1	.1
17. Aggressor	820	17.6	19	1.3
18. Recognition Seeker	509	11.0		0
19. Help Seeker	25	.5	3	.2
20. Dominator	43	.9	108	7.2
Total	4648	100.3	1493	100.2
Interaction	195			

TABLE 39

FREQUENCY AND PERCENTAGE OF THE ROLES PLAYED BY THE COUNSELOR AND STUDENTS FOR SCHOOL III - Grade 7

	Students		Counselor	
Roles	Frequency	Percentage	Frequency	Percentage
Informative				
1. Information Seeker	166	2.8	34	3.6
2. Opinion Seeker	88	1.5	81	8.6
3. Information Giver	1295	22.1	31	3.3
4. Opinion Giver	2843	48.6	17	1.8
Positive				
5. Structurer	8	.1	100	10.6
6. Role Player	91	1.6	1	.1
7. Initiator	46	.8	26	2.8
8. Clarifier	65	1.1	271	28.7
9. Interpreter	51	.9	25	2.6
10. Reflector	6	.1	112	11.9
11. Evaluator	24	.4	23	2.4
12. Expediter	26	.4	203	21.5
13. Supporter	158	2.7	10	1.1
Negative				
14. Passive Resister	89	1.5		0
15. Pollyanna	10	.2		0
16. Blocker	71	1.2	1	.1
17. Aggressor	378	6.5	4	.4
18. Recognition Seeker	266	4.5		0
19. Help Seeker	1	0		0
20. Dominator	172	2.9	6	.6
Total	5854	99.9	945	100.1
Interaction	19			

TABLE 40

FREQUENCY AND PERCENTAGE OF THE ROLES PLAYED BY THE COUNSELOR AND STUDENTS FOR SCHOOL III - Grade 8

Roles	Students Frequency	Students Percentage	Counselor Frequency	Counselor Percentage
Informative				
1. Information Seeker	222	4.9	101	8.0
2. Opinion Seeker	80	1.8	181	14.3
3. Information Giver	1663	36.1	111	8.8
4. Opinion Giver	1608	35.6	32	2.5
Positive				
5. Structurer	3	.1	89	7.0
6. Role Player	24	.5		
7. Initiator	28	.6	9	.7
8. Clarifier	18	.4	381	30.1
9. Interpreter	8	.2	37	2.9
10. Reflector	0		129	10.2
11. Evaluator	4	.1	23	1.8
12. Expediter	30	.7	159	12.6
13. Supporter	92	2.0	4	.3
Negative				
14. Passive Resister	147	3.3		
15. Pollyanna	16	.4		
16. Blocker	143	3.2	3	.2
17. Aggressor	212	4.7	3	.2
18. Recognition Seeker	190	4.2	3	.2
19. Help Seeker	1	0		
20. Dominator	33	.7		
Total	4522	99.5	1265	99.8
Interaction	91			

TABLE 41

BROAD CATEGORIES OF ROLES AND PROGRESS RATIOS FOR MEMBERS OF 7th and 8th GRADE GROUPS FOR

SCHOOL I

7th Grade	Informative	Positive	Negative	Total	Progress Ratio	Rank Order
B	71	21	23	115	.48	5.5
D	171	102	241	514	.30	7
H	477	217	238	932	.48	5.5
L	92	30	23	145	.57	3
M	190	82	74	346	.53	4
P	49	4	10	63	.03	8
S	208	133	31	372	.81	1
T	276	146	89	511	.62	2
8th Grade						
C	468	497	99	1064	.83	1
Ca	278	116	45	439	.72	3
D	299	66	53	418	.55	6
G	167	101	60	328	.63	4
N	258	83	107	448	.44	8
R	220	77	53	350	.59	5
T	247	79	23	349	.77	2
W	426	162	181	769	.47	7

TABLE 42

BROAD CATEGORIES OF ROLES AND PROGRESS RATIOS FOR MEMBERS OF 7th and 8th GRADE GROUPS FOR

SCHOOL II

7th Grade	Informative	Positive	Negative	Total	Progress Ratio	Rank Order
D	246	26	41	313	.38	4
S	282	61	65	408	.48	1
B	342	43	107	492	.29	6
Bg	307	28	133	468	.17	8
F	74	9	21	104	.30	5
C	238	52	78	368	.40	3
P	658	41	52	751	.44	2
J	363	40	109	512	.27	7
8th Grade						
C	261	83	109	453	.43	1
T	410	58	361	829	.14	5.5
J	217	13	190	420	.06	7.5
L	67	4	63	134	.06	7.5
S	298	56	322	676	.15	4
W	173	26	117	316	.18	3
B	421	44	260	725	.14	5.5
K	600	106	371	1077	.22	2

TABLE 43

BROAD CATEGORIES OF ROLES AND PROGRESS RATIOS FOR MEMBERS OF 7th and 8th GRADE GROUPS FOR

SCHOOL III

7th Grade	Informative	Positive	Negative	Total	Progress Ratio	Rank Order
R	374	30	47	451	.38	5
Ch	739	64	338	1141	.16	8
B	825	89	262	1176	.25	7
D	266	20	32	318	.38	5
G	926	118	190	1234	.38	5
M	441	62	34	537	.65	1
S	449	43	43	535	.50	2
V	347	32	39	418	.45	3
8th Grade						
C	656	26	138	820	.16	5
B	306	12	172	490	.07	7
G	427	18	100	545	.15	6
D	405	27	86	518	.24	4
Br	73	2	67	142	.03	8
R	857	62	96	1015	.39	3
S	362	19	23	404	.45	1
A	465	41	58	564	.41	2

TABLE 44

RHO VALUES SHOWING A COMPARISON OF COUNSELOR ROLES FOR SEVENTH AND EIGHTH GRADE

	7th Grade		8th Grade	
	Counselor 2	Counselor 3	Counselor 2	Counselor 3
Counselor 1	.80	.90	.59	.69
Counselor 2		.83		.79

All Rho's significant at .01 level or higher

Parent Survey

A Parent Survey was mailed to the parents of all the boys included in this study after counseling had been completed. A copy of this survey can be found in Appendix E. Of the 96 students involved in the study, we received 73 returns after counseling had been completed. When we compared the means for the experimental group receiving counseling with those of the control group who had not received counseling, we found significant differences in favor of the experimental group with regard to their ability to get along with their mother and other boys as seen by their parents. When the parents were asked to indicate whether or not they could detect an improvement in their son's feeling about his Self-confidence, Studying habits, Chores, Willingness to obey, Willingness to partake in conversations, and his Ability to stay out of trouble, we found that the parents of the experimental group rated their children higher as far as Self-confidence, Studying, Chores, and their Willingness to converse (Table 45).

When the same Parent Survey was mailed out again after the delay period of one year, we found it much more difficult to achieve the same percentage of returns. Either the parents had (a) moved, (b) lost interest, (c) possibly became less sympathetic toward the school, or (d) our follow-up procedures were not as complete as they had been during the Post testing period. Many survey sheets were incomplete, many were not returned.

When we calculated the means for the experimental as opposed to the control group, we found the only item that reached any significance was the one having to do with the parents' opinion as to how well these boys got along with other boys. Here we found the experimental group tended to get along better with other boys than did the control group. It should be noted here that our relatively low number of returns could have been one reason why more items were not significant. However, for every variable there were more responses from parents of experimental students than from parents of those students in the control group.

TABLE 45

A COMPARISON OF MEANS OF POST AND FOLLOW-UP TESTING PERIODS FOR THE PARENT SURVEY

How Does He Get Along With	N		Post Testing			N		Follow-up Testing		
	X	C	X	C	t	X	C	X	C	t
1. Father	39	34	4.9	4.5	NS	30	28	5.3	5.2	NS
2. Mother	39	34	5.0	4.5	.05	33	28	4.9	4.8	NS
3. Brother(s)	39	34	4.6	4.4	NS	22	21	5.0	5.0	NS
4. Sister(s)	39	34	4.4	4.2	NS	26	19	4.9	4.7	NS
5. Teachers	39	34	4.8	4.6	NS	33	26	5.1	4.7	NS
6. Other Adults	39	34	4.9	4.5	NS	34	29	5.3	5.2	NS
7. Other boys	39	34	5.2	4.6	.01	35	28	5.5	4.9	.10
8. Other girls	39	34	4.8	4.6	NS	25	23	5.6	5.2	NS
9. School	39	34	4.8	4.7	NS	29	21	5.7	5.4	NS
What is His Feeling About										
10. Self-confidence	39	34	5.3	4.5	.01	30	24	5.9	5.6	NS
11. Studying	39	34	4.9	4.4	.05	30	24	5.2	5.4	NS
12. Chores	39	34	5.0	4.4	.01	30	24	5.4	5.0	NS
13. Obedience	39	34	4.8	4.6	NS	30	24	5.5	5.1	NS
14. Conversation	39	34	5.0	4.4	.01	30	22	5.5	5.4	NS
15. Staying out of trouble	39	34	5.0	4.6	NS	30	22	5.3	5.2	NS

N = number of responses at each testing period
X = experimental group   C = Control group

Rating Scale:
1 = very much worse
2 = much worse
3 = slightly worse
4 = same
5 = slightly better
6 = much better
7 = very much better

CHAPTER III

CONCLUSIONS AND IMPLICATIONS

In this study, our primary goal was to demonstrate the effect of group counseling on underachieving, acting-out junior high school boys. However, two other effects were studied -- the effects of involving teachers in discussion groups, and the effect of these discussion groups on the attitudes of teachers.

To demonstrate the main effect, six groups of 8 boys were counseled twice a week for 25 sessions with six equated groups serving as controls. Half of these groups were 7th graders and half were 8th graders. There were two experimental groups (one of 7th graders and one of 8th graders) in each of three different schools, each with a different counselor. The teachers of the 7th grade students were involved in discussion groups while the 8th grade teachers served as controls.

What Was The Effect Of Group Counseling?

As a direct result of counseling, the experimental group improved in their self-concept and felt more adequate with regard to general intelligence. They were able to score higher on the general information section of the WISC, but were unable to maintain or exceed scores made by the control group on the arithmetic reasoning subtest and on grades in English. The experimental group, after counseling, were less conforming, leaned more toward non-conforming behavior, felt they had difficulty accepting their peers and felt they were more poorly motivated toward academic work.

After the one year delay period, the experimental group still had a better feeling of self-adequacy with regard for general intelligence, felt better able to cooperate with others, and gained in their feelings toward their peers. However, on the Kvaraceus Delinquency Proneness Test, the students receiving counseling became more delinquency prone than their counterparts. Just why this group became more delinquency prone, we do not know. They could have felt less of a need to please us; could have been hostile toward us for not offering counseling for the delay period; or just became more hostile toward school and society. One other consideration is the the instrument was too sensitive to the Nonconformity variable (there is some question in our minds as to whether this variable is "good" or "bad").

Although we had hoped the intelligence and achievement test scores would improve for the experimental group over the control group after counseling, we now feel that these goals were too ambitious. Intelligence and achievement test scores tend to be too unstable and insensitive to offer group predictions.

When we went "inside" our data and considered the means of the four major groups (X, Xt, C, Ct,) on Tables 12 through 17, it became apparent that both of these instruments offered very little for evaluation in the study. However, the Grades, or marks, attained by these students were more responsive to counseling when the comparison groups were made smaller. The 7th grade experimental and control students were inconsistent in their marks, while the 8th grade experimental group made steady gains in all four subjects as opposed to limited gains by the 8th grade controls.

When we looked at the Acting Out Scale and the SORT for trends shown by the group means, we saw the same pattern (Tables 14 through 17). The 7th grade students -- as a group -- responded differently to group counseling than did the 8th grade. While the 7th grade experimental group made practically no gains over the control group, the 8th grade experimental group felt more cooperative, more accepting of peers, had more self-confidence, were better able to accept authority and, generally, felt more adequate. Certainly more movementa took place for the 8th grade students than for the 7th grade students. This was substantiated by the analysis of the roles played by all six groups and reported in Tables 33 through 40.

On the SORT the changes were slight and not discernible according to grade, but the KD did change with the 8th grade groups making the greater movement. The direction of movement on these two instruments is difficult to evaluate. Increased anxiety on the part of the 7th graders could be interpreted both positively and negatively -- that is, increased anxiety may lead to more activity toward better school work. On the other hand, increased anxiety could lead to more acting-out behavior. This is also true with the variable of non-conformity or conformity.

At the conclusion of this study, 10 boys reached the age of 16. Five were in the experimental group and the other five were controls. All five experimental students stayed in school while three of the five controls became drop-outs.

More generally speaking, the statistical procedures in the analysis of co-variance and the analysis of variance, would tend to lead one to the conclusion that group counseling was not effective with acting-out underachieving junior high school boys. However, the data in the form of group means, or trends, could be more critically interpreted to indicate the contrary. This decision, however, is left to the reader.

What Was The Effect On Students Of Involving Their Teachers In Group Discussions?

Here a limit of the research design should be stated. The results described below must be considered in the light of two variables -- involving teachers in discussion groups, and 7th grade students versus 8th grade students. In other words, the differences between the experimental and control group are due to teacher/grade effect rather than just the involvement of teachers in groups.

By involving teachers in discussion groups, those 7th grade students who were affected by these teachers tended to have better self-structure or ego strength and more consistent behavior. They also tended to be more impulsive or had lower concentration power, felt less able to cooperate with others, and had less confidence in their own ability to succeed when compared with the 8th grade control group. After the delay period of one year, these latter students felt more anxious, tended to be more conforming and less flexible than their counterparts. They felt less able to accept their peers, felt better motivated toward school and better able to accept authority. Although the younger students improved in their scores on paragraph meaning and word meaning to a greater extent than the control group, they were unable to use their abilities to improve school grades. Their grades, or marks, were generally lower than those of the control group.

In summary, the teacher/grade effect caused students to be more conforming, more anxious, and less flexible, as well as causing improved feelings toward school and authority figures but, at the same time, made them less able to get along with their peers. Academically, this combined treatment variable tended to have little positive effect on school marks.

What Was The Effect Of Involving Teachers In Discussion Groups?

Those teachers who had the opportunity of participating in discussion groups valued independence and had a better teacher attitude, but responded less positively to adults than those teachers who were not involved in discussion groups.

Here again, if we looked at the adjusted means for trends and considered those additional scores which were consistent both after counseling and after the delay period, we saw that those teachers in the experimental group had less need for conformity and benevolence. After counseling, these teachers felt a greater need for support and recognition, but after the delay period these needs were less important when compared to the control group.

The teachers' attitudes toward children did not seem to change as a result of the discussion groups, whereas their attitudes toward adults became more critical. Whether or not this sensitivity or criticalness toward themselves and other adults would be considered a gain in favor of the discussion groups is left to the discretion of the reader.

In addition to the three major effects described above, an attempt was made to describe the roles played by the students and the counselors, and this opportunity was used to learn more about acting-out underachieving junior high school boys. The description of roles was presented in the Results section and showed that the counselors and students were significantly consistent in the roles they played, but they varied as to the frequency of roles played. The role analysis seemed to effectively describe the six different groups and their counselors. It was obvious from this analysis that the six groups were not alike as to their degree of involvement and progress over the 25 sessions. The 7th grade groups were not as involved in the process as were the 8th grade groups. The Progress Ratio described in the Results section seemed to adequately identify, in the opinions of the counselors, those students who improved as opposed to those who did not.

The topics discussed by these students are briefly presented in the Results section with a more complete description of these topics, included in Appendix D, in an article submitted by the authors for publication.

LIMITATIONS & RECOMMENDATIONS

A. Had our basic assumption that 7th and 8th grade students were alike been tenable, we would not have confounded our teacher/grade effect. The results obtained could have been attributed to involving teachers in discussion groups. It is also quite possible that this difference between 7th and 8th grade students could have contaminated our results of the counseling effect as well. If 8th grade students responded differently to counseling than 7th grade students, and if these responses were in opposite directions, then it is quite possible that by combining these two groups into one experimental group and comparing them to a control group combined in the same way, the differences in effect would tend to be cancelled. From the means of the individual groups of 7th and 8th graders, we see that this did happen on a number of variables -- the most obvious situation occurring when we compared the Pre, Post, and Follow-up Grades. The 8th grade means improved considerably, the 7th grade means lost, while the control groups maintained their academic average. As a result, when the experimental and control groups were compared, there was no significant difference shown due to the counseling effect.

B. A second limitation to our study had to deal with our selection. When we finally obtained our School Adjustment Index (SAI), we placed the first students from each school in the experimental group, the second student in the control group, the third student in the experimental group, and so forth. If some of the experimental groups had students with extreme SAI scores, they would tend to weight the experimental groups differently from the controls. When we look at our actual group means for our experimental and control groups, we see that the experimental groups tend to have less desirable scores on the Pre testing than do the control groups in many variables. Although these differences were taken into account on the analysis of co-variance, these differences might have contributed to the groups' acceptance of the total counseling process.

C. Another limitation had to do with our adminstration of the evaluative instruments. We assumed that the administered tests were valid indications of an individual's intelligence, achievement, and so forth. However, we compared the Post to the Pre testing and found that, in basic areas such as intelligence and achievement scores, these students were not consistent in their behavior in a testing situation. In a number of cases we found these acting-out students resented taking tests and considered the experience unimportant, therefore invalidating their results. It would seem a wiser procedure to test these students in small groups of two, three, or four students each. This type of student, the acting-out underachiever, needs the support of many others in his war against society. By placing these students in smaller groups and enlisting their support, the evaluative instruments would be more consistent.

D. One of the underlying principles of this study was that group counseling could be done in a typical school setting where the researchers did not ask or receive any special consideration. As a result, one of the three schools had their groups meet in the science laboratory -- a place not conducive to group counseling with acting-out boys. There were too many distractions and too much space in which these students could withdraw from the group and actively resist the process.

E. The project was designed to offer counseling two sessions a week for 25 sessions. Our experience with acting-out students would indicate that two sessions a week are too frequent, that many of the anxieties and hostilities produced on a Monday carried over to Thursday. However, it should be pointed out that an argument in favor of two sessions weekly was based on the fact that these students are quite active and more frequently experience a wider variety of situations in a shorter period of time than do most students. Therefore, the more frequent sessions tended to help relieve some of the anxieties before they developed into actual aggression in the classroom.

F. The counselors for this project were well trained and psychologically oriented. Each was involved in individual counseling for at least five years and was certified in the State of New York. However, their experiences with group counseling was limited to a few opportunities without the thorough background and training needed for this project. Despite this lack of experience, the three counselors with a fourth staff member, discussed their counseling procedures, techniques, etc., to offset some of their personal limitations. These staffing sessions were quite effective and can be highly recommended. However, because of the lack of experience and specific training, these groups might not have been as productive with them as they would have been with more experienced counselors. Although we felt we overcame most of our problems with our groups, the difference between an experienced group counselor and ourselves might have resulted in faster moving groups with a better percentage of goals reached by the end of the 25th session.

FOR FUTURE RESEARCH

Some questions were still left unanswered in this project. Although the data are available, time, facilities, and personnel were not. Below are some of the questions which should be investigated in the future, either as a continuation of this study or as unique and separate studies with additional data.

1. If each group of 8 students counseled was compared with its own control group, would the results have been more significant or more valuable to our pool of knowledge about these students? Did 7th and 8th grade students respond differently to the group counseling process? Did the three counselors have different degrees of success with their groups? Did the three schools have a differential effect on the students in the groups?

2. Can the analysis of roles played by students effectively evaluate growth or success in school achievement? By applying the "Progress Ratio" to each of the six groups and ranking them from most successful to least successful, then comparing this ranking to certain achievement variables, a correlation may be found. Did those individuals receiving higher Progress Ratios tend to make better grades and make better improvement toward school adjustment?

3. Can the "doodles" accumulated during this project be evaluated and a method of scoring devised so that they could be used to offer more information to the counselor and possibly serve as an on-going evaluation of the counseling process?

4. Would a more detailed analysis of the changes made by students in this study yield information about the underachieving, acting-out junior high school boy as well as clarify the meaning of the changes already achieved?

5. Are there reasons other than practice effect for the performance scale scores of the WISC to have increased from 15 to 20 points for the second or third administration, after periods of four months and one year?

APPENDIX A

STRUCTURED-OBJECTIVE RORSCHACH TEST

APPENDIX A

On the Structured-Objective Rorschach Test, the following items were changed either because (a) the item could be offensive to junior high school students or (b) the item required an understanding above that which could be expected from an acting-out underachieving junior high school student. The substitute items maintained the same scoring weights whenever possible. Complete response sheets were pasted over the original lists so that the original items could not be seen. In the following, the original response is in parenthesis beside the response substituted.

Blot No. 1

1. Airplane
2. Elk's horns
3. Blacksmith's anvil (Anvil)

4. Bell
5. Bear's head
6. Coat of arms

7. Squashed bug
8. Clouds
9. Halloween lantern

10. Feet
11. Statue
12. Leaf

13. Hip bones (Pelvis)
14. Crab's claws
15. Human head (Male organs)

16. Hourglass
17. Birds fighting
18. X-ray of bony structure

19. Bat
20. Mountains
21. Human body (Nude woman)

22. Lobster
23. Witches flying on brooms
24. Map of mountains & valleys (Relief map)

25. Mask
26. Man squatting (Buddha sitting)
27. Dog's head

28. Wings of an angel (Wings of Mercury)
29. Fossil on stone
30. Beetle (Scarab)

Blot No. 2

31. Horse's head
32. Calves sucking a bottle
33. Clowns playing patty-cake

34. Stumbling drunks
35. Castle
36. Human profile (Buttocks)

37. Insect's feelers
38. Butterfly
39. Horseshoe crab

40. Vertebra of backbone (Vertebra)
41. Santa Claus caps
42. Flames

43. Candlesticks
44. Dog
45. Moth (Primitive organism)

46. A modernistic painting
47. Oriental headdress
48. Sunset

49. Stockings
50. Bear
51. Two people fighting

52. Lamp
53. Rug
54. Comb of a turkey

55. Mountains and hills
56. Blood
57. Bowl

58. Bonfire
59. Lake
60. Woman's face (Female organs)

Blot No. 3

61. Waiters bowing
62. Islands
63. Kettle

64. Stencil
65. Dangle earrings
66. A modernistic painting

67. Spider
68. Bow tie
69. Throat (Esophagus)

70. Water
71. Face (Womb)
72. Coat of arms

73. Hip bones (Pelvis)
74. Skeleton heads
75. Italy

76. North America
77. Blood splotches
78. Kidneys

79. Pole
80. Dummies
81. Butterfly

82. Crab
83. Football
84. Rooster

85. Leg
86. Mud turtle
87. X-ray of a hip bone (X-ray of a pelvis)
88. Human mask (Female organs)
89. Bird diving
90. Basket

Blot No. 4

91. Coves and inlets
92. Lamb's head
93. An animal skin

94. Dancing phantom
95. Spinal column
96. Claws

97. Cow's udder
98. Volcano
99. An ape glaring at me

100. Dwarf walking in a fur coat
101. Head of a bull
102. Fountain

103. Bird's head
104. Tree stump
105. Dancing bear (Bear doing the Charleston)

106. Collegiate football fan
107. Tunnels
108. Alligator's face

109. Lakes
110. Billowing smoke
111. Giant's feet

112. Flower
113. Horse's hoof
114. Boat

115. Teeth of an animal
116. Candle
117. Snake

118. Veiled woman (Female organs)
119. Chickens
120. Bear's face

Blot No. 5

121. Butterfly
122. Rabbit's ears
123. Fish

124. Bottle
125. Tweezers
126. Map of mountains & valleys (Relief map)
127. Squashed bug
128. Insect's feet
129. Wooden leg

130. Bee stinger
131. Man with a hat on
132. Man doing the splits

133. Charging buffaloes
134. Alligator's head
135. "V" for victory

136. Mouse's tail
137. Billow of smoke
138. Woman dancing

139. X-ray of a nervous system
140. Boy lying on a hillside
141. Bayonet

142. Fork
143. Bird with its beak open
144. Legs of a bench

145. Insect antennae
146. Derby hat (Male organs)
147. Vase

148. Man's legs
149. Dancing rabbit
150. Wishbone

Blot No. 6

151. Chest X-ray
152. Comic faces
153. Turtle

154. Animal skin
155. Hat rack
156. River

157. Butterfly
158. Gate
159. Squashed bug

160. Aerial map
161. A religious cross
162. Flying fish

163. Barber pole
164. Maple leaf
165. Big animal swan-diving

166. Map of mountains & valleys (Relief map)
167. Snake's head
168. Kneeling woman (Female organs)

169. Whiskers
170. Mask
171. Photo of a flying jet

172. Dancer whirling rapidly
173. A fish opened up
174. Eggs

175. Mice
176. Dinner bell
177. King's profile (Male organs)

178. Ancient kings' heads
179. Flying gulls
180. Rug

Blot No. 7

181. Clouds
182. Carved jewelry (Cameos)
183. Halo

184. Monkey
185. Alaska
186. Mask

187. Coat of arms
188. Kangaroo
189. Insect's wings

190. Christ on the Cross
191. Feather
192. Scotty dogs balancing wieners

193. Kerosene lamp
194. Map of France
195. Pillow

196. Coffee grinder
197. Human figure (Female organs)
198. Statues on fountains (Fountain statues)
199. Map of mountains & valleys (Relief map)
200. Canal locks
201. Chandelier

202. Sweet potato
203. Dancing Indian
204. Modernistic sculpture

205. Puppet faces (Punch and Judy faces)
206. Arguing women
207. Paw of a dag

208. Open hinge (Spread hinge)
209. Ameoba
210. Whipped cream

Blot No. 8

211. Mud streak
212. Sweet pea
213. Cross section of part of the body (Anatomical cross section)

214. Rainbow
215. Colored rock
216. Seagull

217. Old-style gearshift lever
218. Orchid
219. Coat of arms

220. Wallpaper figure
221. Stained nervous tissue
222. Skeleton of ribs

223. Swivel (Cable swivel)
224. Walrus
225. Decorative vase

226. Hilltop castle
227. Butterfly
228. Golf clubs

229. Tree roots
230. Leaf
231. Human profile (Buttocks)

232. Hip bones (Pelvis)
233. Bears climbing
234. Map of Texas

235. Ice-cream cone
236. Flags waving
237. Corset

238. Forest
239. Lobster
240. Lakes

Blot No. 9

241. Wall paper design
242. Clowns laughing
243. Violin

244. Ram's head
245. Faces of Irishmen
246. Flowers (Gladioli)

247. Smears of paint
248. Chicken
249. Vase

250. Moss
251. Flower petals
252. Modern painting (Futuristic painting)
253. Lighted fountain
254. Orchid
255. Lakes

256. Shinbone
257. Northern lights
258. Ape

259. Butterfly
260. Toadstools
261. Bridge

262. Slits in canvas
263. Chickens being cooked
264. Moose's head

265. Lungs
266. Screwdriver handle
267. Claws

268. Candlesticks
269. Lampshade
270. Dancing Gay Nineties woman (Rollicking Gay Nineties woman)

Blot No. 10

271. Peacocks (Birds of Happiness)
272. Map of California
273. Sea-scene wallpaper

274. Oriental design
275. Masked knights
276. Canal with locks

277. Goblin
278. Seahorses
279. Coat of arms

280. Crab
281. Two Japanese women
282. Fried eggs

283. Sign of a pawnbroker (Pawnbroker's balls)
284. Canaries
285. Eiffel tower

286. Rabbit's head
287. Two children leaning toward each other
288. Porpoise

289. Pole
290. Blood spots
291. Caterpillar

292. Mouse
293. Egyptian gods dancing
294. Brass chandelier

295. Ax
296. Coral reef
297. Lion

298. Wishbone
299. Two chattering women
300. Narrow canyon (Chasm)

APPENDIX B

ACTING-OUT SCALE

Directions: The following 23 items were dictated on tape and played for each student in the presence of the counselor

These items served as stimuli for the Colvin Silhouette procedure. This procedure suggests that 36 identical black silhouettes of boys' heads be placed on a strip and attached to a wall at about eye level. The student is then asked to indicate where he feels he would appear in comparison to other members in his class. Each head is identified by a number which is unknown to the student, with numbers 18 or 19 representing the middle of the scale and the lower number (1) representing the positive end and the higher number (36) representing the poorer self-concept.

The specific instructions were as follows (The underlined words were not spoken on the tape, but the item rated these self-concepts.):

1. Self Adequacy
Here are some boys. I'd like to have you think of them as boys in your class and I'd like to have you locate yourself in terms of these boys as you feel you would appear.
First, let's consider ability. The boys at this end are very intelligent. They seem to be very bright.
On the other hand, the boys at this end are not. They find it hard to understand.
Where are you?

2. Achievement
Now think of grades. The boys at this end seem to be doing their best. The grades they are getting are what they expect in terms of their ability.
On the other hand, the boys at this end aren't using their ability very much and their grades are far below their actual ability.
Where are you?

3. Cooperation
Now let's think of getting along in class. The boys at this end are pretty cooperative. They take part in what's going on in class and, in general, get along with the class and the teacher.
The boys at this end are always causing trouble, talking back, doing things to upset the teacher and the class.
Where are you?

4. Reputation
Now let's think of reputation - what other people think of them. The boys at this end have a good reputation - no one has ever said anything against them.
The boys at this end have bad reputations. Many people have complained about them, or they've been in trouble with the school, or perhaps even with the law.
Where are you?

5. Cooperation
Now let's think of helping. The boys at this end are cooperative - they try to help other people and work well in the group.
The boys at this end like competition. This type of person is a "loner"; he doesn't work well with other people.

Acting-Out Scale - Continued.

6. Acceptance of Self

Now let's think of social groups. The boys at this end of the scale are pretty comfortable when they are in social groups; they're not worried about what other people are thinking of them.

The boys at this end, however, are always wondering about what people think of them - they have to impress others by doing things to get attention.

7. Acceptance of Peers

Now let's think of getting along. The boys at this end seem to be able to get along with others - they're friends with everybody.

The boys at this end are not; they pick on others, particularly people who are smaller than they are. They like to fight. They like to "shock" others.

8. Acceptance of Authority

Now let's think about getting along with authority. The boys at this end accept people in authority, or rules and regulations. They don't seem to have to try to break rules or laws.

The boys at this end seem always to be in trouble with authority, with the school or with their parents, or perhaps with the law. They seem to feel that rules are made to be broken.

9. Acceptance of Others

Now let's think about what they like. This type of person likes people. He gets along with people and makes friends. He becomes a part of the social group in any type of social situation.

On the other hand, this type of boy doesn't seem to like people. He is more interested in things. He gets along best when he's dealing with something that he can get his hands on.

10. Self Confidence

Now let's see the way they look at the world. This type of boy is pretty confident that everything is going to turn out all right. He's sure that in the long run he's going to be rather successful. He's not too much afraid of how he's going to make out in the world.

On the other hand, this type of boy feels quite hopeless about how things are going to turn out in life. He's not very confident that things are going to turn out well.

11. Acceptance of Others

Now, about getting along with others. This type of person likes other people and trusts them, and tries to help them. He thinks other people are very sincere and friendly, and he is friendly back toward them.

This boy feels that other people are rather slippery; he doesn't trust them. He thinks that they are trying to get in his way rather than trying to help him. He feels that they are unfriendly and that he'd better be careful.

12. Acceptance of Peers

Now let's look at it another way. This type of boy thinks that other kids are pretty responsible; he thinks that they are capable of making up their own minds and have the ability to make a decision or do a job without much outside help and guidance.

People here look at other kids as being pretty unreasonable and rather flighty. They feel that others continually need direction or pushing to get them to do the right things.

Acting-Out Scale - Continued.

13. Acceptance of Authority

Now, how do they think about other people? Boys here really like other kids. For instance, this boy sees others as being really worthwhile. He knows how they feel and he understands them. He likes to have other kids around.

This boy sees other people as making him uncomfortable, and if possible he tries to have little to do with them. He's rather suspicious and afraid of other kids. He just doesn't trust them.

14. Self Adequacy

Now, how well do these boys think that they can do things? This boy is pretty sure of himself. He feels that he can deal with problems that come up, and he approaches his problems with a lot of confidence.

This boy is afraid he can't handle problems that come up. He approaches problems already feeling that he's not going to be able to handle them very well at all.

15. Self Adequacy

Now let's think about how these boys use their ability. When he faces a problem, this boy can figure out the ways of doing things. He shows what we call "initiative". He can figure out new ways of doing things that are effective, that really solve the problem, and the way he solves them usually is agreed upon by most people to be pretty good.

This type of person is kind of helpless, and doesn't solve problems very well. Quite often he acts without much thought, kind of "goes off the deep end". He doesn't think he has much ability, and ends up not really solving the problem. He's afraid to try new things. He runs to somebody else for help.

16. Cooperation

Now let's think about getting along with others. This type of person is interested in other people. He's interested in trying to help. He tries to cooperate in working out problems with other people.

This boy, however, tries to work alone. He doesn't work well with other people. He's interested in trying to be over people, talking them into doing what he wants, rather than trying to do what they want.

17. Acceptance of Others

Now let's talk about getting along. This type of boy gets along with others. He accepts other people and is willing to work with them. He is not afraid of them.

On the other hand, this type of boy is always getting into fights. He's destroying school property or causing disruption in class, and he just doesn't get along in the social group.

18. Acceptance of Authority

Now let's talk about teachers. This boy likes his teachers. He thinks they're pretty reasonable people, and he trusts the decisions that they make. If they make a rule, he is willing to abide by it.

This boy here doesn't trust teachers. He thinks they "have it in for him" or that they are unfair.

19. Acceptance of Authority

This boy thinks that his teachers really have his best interests at heart, and he enjoys being around teachers. He and his teachers seem to understand each other.

On the other hand, this boy sees his teachers as pretty threatening; he dislikes them and he dislikes what they are trying to teach, and he's pretty suspicious of them. He talks back in class to them; and he tries to make them uncomfortable. He's against school.

20. Impulsiveness

This boy thinks before he acts. He tries to see beforehand how his actions will affect others.

This boy acts before he thinks. He doesn't stop to consider the result of what he does.

21. Motivation

This boy never wants to miss school. His attendance is very good, and he tries to go to school even when this is difficult for some reason.

This boy doesn't care about his attendance. He finds excuses for missing school, and sometimes is truant, or plays hookey.

22. Acceptance of Peers

This boy pals around with many kinds of people. Even though they like different things, he finds many groups that he likes to be with.

This boy pals around with his gang. Somehow others don't seem to have much in common with him. He doesn't like to be with other groups.

23. Acceptance of Authority

This boy is very careful about his appearance. He has a neat haircut, and wears the kind of clothes teachers expect him to wear at school.

This boy wears clothes that make him look like the rest of his gang. Even when he has a haircut, his hair is long.

APPENDIX C

Appendix C

NATHAN JASPEN
3152 Oceanside Road
Oceanside, New York

Rockville Centre 4-0802

September 13, 1962

Dr. Benjamin Cohn
Board of Cooperative Educational Services
Group Counseling Project
546 N. Bedford Road
Bedford Hills, New York

Dear Dr. Cohn:

Please let me begin by apologizing for taking so long to get this to you. I was much busier than I expected to be this last month.

As I understand my notes, you have a large number of scores (about 50) for each student participating in the study. There were 3 schools, each school contributing 4 groups of 8 students each. The four groups were as follows:

Teacher and counselor	(7Xt)
Teacher, no counselor	(7Ct)
No teacher, counselor	(8X)
No teacher, no counselor	(8C)

It happens that the "no teacher" groups were all 8th grade, and the "teacher" groups were all 7th grade. The grade and teachers are therefore confounded, and the effects due to each cannot be separated. The "teacher" effect therefore really means the "grade-teacher" effect.

There were also three testing times: a pretest, a posttest, and a delayed test. We therefore wish to do an analysis of the pretest scores, an analysis of the posttest scores corrected for the pretest, and an analysis of the delayed test corrected for the pretest.

Your colleagues and I discussed some possible ways of analyzing the data. In particular, we discussed the t-test, and I should like to indicate why the t-test is not a desirable solution for your problem.

The t test assumes that all the individuals in an experimental treatment have been treated alike, and that the experimental and control groups differ with regard to the experimental variable only. For instance, if we wished to contrast the "counselor" group with the "no counselor" group on the pretest, the 48 children in the "counselor" group would constitute the experimental group, and the 48 children in the "no counselor" group would constitute the control group. Now this way of setting up the problem violates the assumption that the 48 individuals within each group are all treated alike. Actually there are two additional sources of systematic variation - schools and teachers. As a result, the error term would be overestimated, and the t ratio would be underestimated.

Of course we could do 6 t-tests, contrasting each group of 8 with its corresponding group of 8. This creates two problems. The samples are terribly small, and there are 6 answers to the problem instead of 1. Furthermore, the 6 answers might be inconsistent. Besides, there would be no measure of the interaction effects.

What I would propose is an analysis of variance of the pretest scores, and an analysis of covariance of the posttest scores and of the delayed test scores. The design for the analysis of variance is shown in Table 1. The x's indicate cells not to be filled in.

In order to compute the sums of squares, it is necessary to calculate, for each variable, the sum of the scores for each cell of 8 individuals. There are 12 such cells, four in each school. Let us call the sums of the Teacher-Counselor Group in schools 1, 2, and 3, S_1, S_2, and S_3 respectively. Similarly, the sums for the Teacher-No counselor Group are S_4, S_5, and S_6. The sums for the No Teacher-Counselor Group are S_7, S_8, S_9. The sums for the No Teacher-No Counselor Group are S_{10}, S_{11}, S_{12}. It is also necessary to calculate the sum of the squares of all 96 scores = ΣX^2. This value does not have to be broken down by cell. It must be calculated directly from the 96 scores, not from the 12 cells.

Now obtain the sums across and down as shown in Table 2. The formulas for the marginals are shown in Table 3.

Next calculate the T constants shown in Table 4. There are 8 such values for each variable.

We are now ready to calculate the Sums of Squares for Table 1. The formulas are presented in Table 5.

Each mean square is, of course, the sum of squares divided by its degree of freedom. No mean square is calculated for the total.

Each F ratio for the main effects and interaction terms is the mean square for that effect or interaction divided by the error mean square.

The significance of each F is determined from a table of F such as is found in most statistics texts. Because you will be calculating a great many F's, it would be desirable for the computer program to include critical values of F at the .01 and .05 levels for the degrees of freedom used in this problem (1 and 84; 2 and 84).

It may be argued that at the inception of the experiment the only differentiation among the students is school, and that teacher and counselor effects are not present. However, teacher effects are associated with grade effects; and it is desirable to verify that counselor effects are in fact absent. At any rate, the sums of squares for the pretest are required for the analyses of covariance.

In order to do the analyses of covariance, sums of squares as outlined in Tables 1 to 5 should be calculated for the posttest and delayed test also. This can all be done on one run. There are 36 sums to be cumulated for each test for each variable, and therefore 108 sums will be cumulated for each variable. In addition, one ΣX^2 value will be cumulated for each test for each variable; that is, three ΣX^2 values will be cumulated for each variable.

In addition to the three sets of sums, it is necessary to obtain two sets of cross-products: Pretest x Posttest and Pretest x Delayed Test. As far as the original 96 subjects are concerned, this requires only two additional storage units, corresponding to the three storage units reserved for sums of squares. These two storage units will be used to cumulate sums of cross-products. If the first student has a Pretest score of 2, a Posttest score of 3, and a Delayed Test score of 4, the value 6 will be cumulated to the first cross-product; and the value 8 will be cumulated to the second cross-product.

After the 96 scores for each of the three tests per variable have been cumulated in all 108 cells per variable, plus the 3 squares terms and the 2 cross-product terms, and after Tables 4 and 5 are calculated for each test for each variable, two sets of cross-product values of T are calculated for each variable. Let us replace S_{32} by X_{32}, Y_{32}, and Z_{32}, for the pretest, posttest, and delayed test respectively. Then the first cross-product T_1 will be $\frac{1}{48}$ $(X_{32}Y_{32} + X_{33}Y_{33})$, and the second cross-product value of T_1 will be $\frac{1}{48}$ $(X_{32}Z_{32} + X_{33}Z_{33})$. And so on up to T_6.

Next we calculate the sums of cross-products XY and XZ, corresponding to the sums of squares in Table 5. The first cross-product total for the posttest will be $\Sigma XY - \frac{1}{96}$ $(X_{36}Y_{36})$, and the first cross-product total for the delayed test will be $\Sigma XZ - \frac{1}{96}$ $(X_{36}Z_{36})$.

Table 6 recapitulates the sums of squares and cross-products for the posttest. A similar table would be prepared for the delayed test.

The sums of squares column for the pretest is designated as Σx^2 in Table 6; the sums of squares for the posttest is designated Σy^2; and the cross-product term is designated Σxy.

In Table 7, each of the sums of squares and cross-products for the main effects and interaction terms is added to the error term. The degrees of freedom are also combined.

In Table 8, the adjusted sums of squares, that is, the sums of squares for the posttest corrected for the pretest, are calculated. The formula for this is as follows:

$$\text{adjusted Sum of Squares} = \Sigma y^2 - \frac{(\Sigma xy)^2}{\Sigma x^2}$$

The adjusted degrees of freedom is equal to the degrees of freedom in Table 7, less 1.

Now we do seven small analyses, one for each of the main effects A, B, C, and interactions AB, AC, BC, ABC. Table 9 shows the analysis for effect A. The adjusted sum of squares for A is the difference between the sum of squares for (A + Error) and the sum of squares for error. The mean squares equal the sum of squares divided by the degrees of freedom. Omit the mean square for (A + Error). The F ratio for A is equal to the mean square for A divided by the mean square for error, and it has 1 and 83 degrees of freedom. The F ratio for effect C will have 2 and 83 degrees of freedom.

Table 9 is repeated for Effects B, C, AB, AC, BC, and ABC. Then the delayed test is similarly treated.

This completes the analyses of covariance as far as the significance tests are concerned. It remains to adjust the posttest and delayed test means for the several groups, so that the posttest scores of the teacher and no teacher groups can be compared, for instance, correcting for possible inequality in the pretest. Note that the analyses of covariance shows whether the difference is significant, but it does not show what the difference is, nor the direction of the difference.

Let us calculate the adjusted mean for the Teacher Group. This is

$$\text{Adjusted } \bar{Y}_{\text{Teacher}} = \bar{Y}_{\text{Teacher}} - (\bar{X}_{\text{Teacher}} - \bar{X}_{\text{Total}}) \frac{\Sigma xy}{\Sigma x^2}$$

where Σxy and Σx^2 are taken from Table 6, the Error row. In the same way, the adjusted mean for the No-Teacher group may be found:

$$\text{Adjusted } \bar{Y}_{\text{No Teacher}} = \bar{Y}_{\text{No Teacher}} - (\bar{X}_{\text{No Teacher}} - \bar{X}_{\text{Total}}) \frac{\Sigma xy}{\Sigma x^2}$$

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In the same way the other adjusted means may be found.

Study 2 was defined by your colleagues to include two groups of teachers in each of the three schools. The groups might be designated Experimental and Control, or Treatment and No Treatment. In School 1 each group consists of 5 teachers, in School 2 each group consists of 8 teachers, and in School 3 each group consists of 5 teachers.

Tables 11-19, corresponding to Tables 1-9, show the required analyses.

When I discussed this problem with your colleagues in my office, I questioned whether the IBM 1401 was a suitable computer for this application. I would recommend the IBM 1620 or a larger computer.

Sincerely yours,

Nathan Jaspen
Professor of Educational Statistics

Table 1. Analyses of Variance for 2 x 2 x 3 Factorial Design, 8 cases per cell

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Square	F
Main Effects				
A. Teachers		1		
B. Counselors		1		
C. Schools		2		
Interaction				
AB		1		
AC		2		
BC		2		
ABC		2		
Residual				
Error		84		x
Total		95	x	x

Table 2. Sums of Scores for Each Cell, and Marginals

	School 1	School 2	School 3	All Schools
Teacher-Counselor	S_1	S_2	S_3	S_{13}
Teacher-No Counselor	S_4	S_5	S_6	S_{14}
No Teacher-Counselor	S_7	S_8	S_9	S_{15}
No Teacher-No Counselor	S_{10}	S_{11}	S_{12}	S_{16}
Teachers	S_{17}	S_{18}	S_{19}	S_{32}
No Teachers	S_{20}	S_{21}	S_{22}	S_{33}
Counselors	S_{23}	S_{24}	S_{25}	S_{34}
No Counselors	S_{26}	S_{27}	S_{28}	S_{35}
Totals	S_{29}	S_{30}	S_{31}	S_{36}

Table 3. Derivation of marginals

$s_{13} = s_1 + s_2 + s_3$

$s_{14} = s_4 + s_5 + s_6$

$s_{15} = s_7 + s_8 + s_9$

$s_{16} = s_{10} + s_{11} + s_{12}$

$s_{17} = s_1 + s_4$

$s_{18} = s_2 + s_5$

$s_{19} = s_3 + s_6$

$s_{20} = s_7 + s_{10}$

$s_{21} = s_8 + s_{11}$

$s_{22} = s_9 + s_{12}$

$s_{23} = s_1 + s_7$

$s_{24} = s_2 + s_8$

$s_{25} = s_3 + s_9$

$s_{26} = s_4 + s_{10}$

$s_{27} = s_5 + s_{11}$

$s_{28} = s_6 + s_{12}$

$s_{29} = s_1 + s_4 + s_7 + s_{10}$

$s_{30} = s_2 + s_5 + s_8 + s_{11}$

$s_{31} = s_3 + s_6 + s_9 + s_{12}$

$s_{32} = s_{17} + s_{18} + s_{19}$

$s_{33} = s_{20} + s_{21} + s_{22}$

$s_{34} = s_{23} + s_{24} + s_{25}$

$s_{35} = s_{26} + s_{27} + s_{28}$

$s_{36} = s_{29} + s_{30} + s_{31}$

Table 4. Calculation of t

$$T_1 = \frac{1}{48}\left(S_{32}^{2} + S_{33}^{2}\right)$$

$$T_2 = \frac{1}{48}\left(S_{34}^{2} + S_{35}^{2}\right)$$

$$T_3 = \frac{1}{32}\left(S_{29}^{2} + S_{30}^{2} + S_{31}^{2}\right)$$

$$T_4 = \frac{1}{24}\left(S_{13}^{2} + S_{14}^{2} + S_{15}^{2} + S_{16}^{2}\right)$$

$$T_5 = \frac{1}{16}\left(S_{17}^{2} + S_{18}^{2} + S_{19}^{2} + S_{20}^{2} + S_{21}^{2} + S_{22}^{2}\right)$$

$$T_6 = \frac{1}{16}\left(S_{23}^{2} + S_{24}^{2} + S_{25}^{2} + S_{26}^{2} + S_{27}^{2} + S_{28}^{2}\right)$$

$$T_7 = \frac{1}{8}\left(S_{1}^{2} + S_{2}^{2} + S_{3}^{2} + S_{4}^{2} + S_{5}^{2} + S_{6}^{2} + S_{7}^{2} + S_{8}^{2} + S_{9}^{2} + S_{10}^{2} + S_{11}^{2} + S_{12}^{2}\right)$$

$$T_8 = \frac{1}{96}\left(S_{36}^{2}\right)$$

Table 5. Calculation of Sums of Squares

$A = T_1 - T_8$

$B = T_2 - T_8$

$C = T_3 - T_8$

$AB = T_4 - T_1 - T_2 + T_8$

$AC = T_5 - T_1 - T_3 + T_8$

$BC = T_6 - T_2 - T_3 + T_8$

$ABC = T_7 + T_1 + T_2 + T_3 - T_4 - T_5 - T_6 - T_8$

$\text{Error} = \Sigma X^2 - T_7$

$\text{Total} = \Sigma X^2 - T_8$

Table 6. Recapitulation of Sums of Squares and Cross-products for Analysis of Covariance.

Source of Variation	Degrees of Freedom	Σx^2	Σxy	Σy^2
A	1			
B	1			
C	2			
AB	1			
AC	2			
BC	2			
ABC	2			
Error	84			
Total	95			

Table 7. Sums of Squares and Cross-products for Sources of Variation Combined with Error Term for Analyses of Covariance

Source of Variation	Degrees of Freedom	Σx^2	Σxy	Σy^2
A + Error	85			
B + Error	85			
C + Error	86			
AB + Error	85			
AC + Error	86			
BC + Error	86			
ABC + Error	86			
Error	84			

Table 8. Adjusted Sums of Squares for Analysis of Covariance

Source of Variation	Adjusted Degrees of Freedom	Adjusted Sums of Squares
A + Error	84	
B + Error	84	
C + Error	85	
AB + Error	84	
AC + Error	85	
BC + Error	85	
ABC + Error	85	
Error	83	

Table 9. Test of Significance for Effect A

Source of Variation	Adjusted Degrees of Freedom	Adjusted Sum of Squares	Mean Square	F
A + Error	84	from Table 8	X	X
Error	83	from Table 8		X
A	1	difference		

(No Table 10)

Table 11. Analyses of Variance for 2 x 3 Factorial Design, with 5, 8, and 5 Teachers in Each Treatment for the 3 schools

Source of Variation	Sum of Square	Degrees of Freedom	Mean Square	F
A Treatment Effect		1		
B School		2		
AB Interaction		2		
Error		30		X
Total		35	X	X

Table 12. Sum of Squares for Each Cell, and Marginals

	School 1	School 2	School 3	All Schools
Treatment	s_1	s_2	s_3	s_7
No Treatment	s_4	s_5	s_6	s_8
Total	s_9	s_{10}	s_{11}	s_{12}

Table 13. Derivation of Marginals

$$S_7 = S_1 + S_2 + S_3$$

$$S_8 = S_4 + S_5 + S_6$$

$$S_9 = S_1 + S_4$$

$$S_{10} = S_2 + S_5$$

$$S_{11} = S_3 + S_6$$

$$S_{12} = S_7 + S_8$$

Table 14. Calculation of T

$$T_1 = \frac{1}{18} (S_7^2 + S_8^2)$$

$$T_2 = \frac{1}{10} (S_9^2) + \frac{1}{16} (S_{10}^2) + \frac{1}{10} (S_{11}^2)$$

$$T_3 = \frac{1}{5} (S_1^2 + S_3^2 + S_4^2 + S_6^2) + \frac{1}{8} (S_2^2 + S_5^2)$$

$$T_4 = \frac{1}{36} (S_{12})^2$$

This note applies to all of the following tables: Calculated for Teacher Groups with N's of 5, 8, and 5 - this was revised for our study for N's of 5, 5, 5.

Table 15. Calculation of Sum of Squares

$$A = T_1 - T_4$$

$$B = T_2 - T_4$$

$$AB = T_3 - T_1 - T_2 + T_4$$

$$\text{Error} = \Sigma X^2 - T_3$$

$$\text{Total} = \Sigma X^2 - T_4$$

Table 16. Recapitulation of Sums of Squares and Cross-Products for Analyses of Covariance

Source of Variation	Degrees of Freedom	Σx^2	Σxy	Σy^2
A	1			
B	2			
AB	2			
Error	30			
Total	35			

Table 17. Sums of Squares and Cross-Products for Sources of Variation Combined with Error Term for Analyses of Covariance

Source of Variation	Degrees of Freedom	Σx^2	Σxy	Σy^2
A + Error	31			
B + Error	32			
AB + Error	32			
Error	30			

Table 18. Adjusted Sums of Squares for Analyses of Covariance

Source of Variation	Adjusted Degrees of Freedom	Adjusted Sum of Squares
A + Error	30	
B + Error	31	
AB + Error	31	
Error	29	

Table 19. Test of Significance for Effect A

Source of Variation	Adjusted Degrees of Freedom	Adjusted Sum of Squares	Mean Square	F
A + Error	from Table 18	30	X	X
Error	from Table 18	29		X
A	difference	1		

APPENDIX D

Appendix D

The Acting-out Underachiever

Edward J. Gibian, Benjamin Cohn, Charles F. Combs
and A. Mead Sniffen

Board of Cooperative Educational Services, Bedford Hills, New York

What are these children really like - those who achieve below capacity and who are constantly in trouble in school? Why do they seem unable to learn from their experience? What do they gain from behavior that seems irresponsible, disobedient, disruptive and antagonistic?

In an effort to learn more about these students and to discover ways of helping them, the authors undertook a project to demonstrate the effects of group counseling with underachieving junior high school boys with acting-out behavior. As group counselors we have had many opportunities to work with similar boys and girls in their own school setting as they face major problems to school adjustment and achievement.

Although these children possess differing degrees of adjustment, levels of intelligence, levels of achievement, and dissimilar environmental influences, the problems discussed and the feelings expressed in group counseling were very similar. These acting-out underachieving pupils have a great deal more in common than one would imagine at first glance. Although they harbor hostile feelings toward others and seem externally to be so sure of themselves, they are actually very insecure and have very basic needs for warmth, understanding and acceptance from the very people they try to punish - parents, teachers, and peers.

The feelings these pupils express freely in the permissive, confidential atmosphere of the group counseling relationship appear to center around three major topics of concern; the teacher as a member of the school environment, their parents as authority figures and adult models, and themselves as part of a broad peer group.

Many feelings expressed about teachers are similar to those expressed toward parents; often these pupils perceive teachers as substitute parents in a substitute but equally hostile environment. They see the environment as hostile because their needs are not being met. Like people in general they support those peer groups that seem to meet their needs and reject or rebel against those that do not.

With the underachieving, acting-out child it is his own feeling of inadequacy that is reflected in his inability to perform satisfactorily. And there are three important points to keep in mind in order to understand what these pupils are trying to tell us. First, they hope things are not as bad as they fear and as a result statements and attitudes expressed by the students were usually tempered or modified by some member or members of the group. Second, this child tends to generalize his negative feelings; he looks for little faults in his environment and uses these as "anchors" or points of orientation for bringing order to his life. Such students find school in general unpleasant. Third, expressed attitudes toward parents and teachers often tend to be rationalizations rather than facts. Pupils say, "I don't do my homework because my mother yells at me." Or, "I don't do well in school because teachers don't give me a break." Although there may be some truth in rationalizations, here the truth is colored by feelings about themselves which these pupils are not able to face.

Feelings about Teachers

Because acting-out underachievers have many feelings in common this prompts us to examine them more closely. Understanding and acceptance of these feelings are basic to our efforts to reach and teach these students. They have many complaints about teachers. They feel teachers are unfair in many ways and lack understanding and sensitivity to their feelings.

They have difficulty dealing with what they consider inconsistencies in our behavior and are highly sensitive to our slightest professional or personal shortcoming. Although these feelings often are the result of the pupil's own personality structure, some may be recognized as normal reactions to poor teaching methodology. We recognize that these underachievers exaggerate and misconstrue, and that some of their statements are based on distorted perceptions or represent partial truths.

Needless to say, teachers are human and have feelings that show through under stress. The important thing to remember as counselors is that, to these students, teachers are their second chance to be respected, understood and even loved. For some reason they missed their first chance with their parents. A teacher who allows his personal problems or frustrations to be projected into the classroom adds to their feeling of insecurity. This type of child often reacts by fighting back, continually testing the teacher's limits of tolerance and understanding.

If we reject them, our rejecting attitude compounds their difficulties. And often we do reject these pupils in many ways that seem inconsequential to us, but are of vital importance to them. If the teacher punishes the group for the misdeeds of a few, or uses physical punishment, or reacts impulsively, he offers these pupils reason to feel disliked.

How many times we unwittingly refer to a student as a "pest," "dope," "stupid," and lecture on trivialities. These students are especially sensitive to name-calling and "sermonizing." They resent being preached at. They realize their own shortcomings and feel that a few words of reminder are sufficient. Name-calling or a sermon may be added proof to them that they are incapable of learning; a reinforcement of feeling inadequate and unacceptable to others.

To the underachieving child who may be acting-out, adults and, especially teachers, often seem to be rigid and inflexible people. These students have a poignant need for proof that someone is trying to see their side. They complain that teachers "get mad" when they fail to complete a homework assignment, even though their reasons for not doing so may be legitimate. This makes them feel even more strongly that "no one cares." To these pupils persons in authority often appear to be those who most embarrass them, who point out their shortcomings, who reject them

We as educators sometimes tend to overlook specific problems of the individual pupil as we go about our daily business. The teacher may make homework assignments with good purpose and intention, without considering the degree of hardship involved with a particular pupil. If the pupil has a reading handicap it might well be impossible for him to complete an assignment, in terms of either time or comprehension. When a pupil lacks a tool skill we may encourage the perfunctory performance of a meaningless task and thus reinforce his feeling of defeat. The underachiever, because of his already established feelings of inadequacy, reacts even more strongly than we ourselves would if expected to do what we think is impossible.

Inconsistencies in our own behavior add to the frustrating effects of school. For instance, there are times when teachers wish to be treated as adults with definite privileges but simultaneously invite relationships that would place them at the same level as students. The underachiever, insecure as he is, may be able to differentiate and accept adult-pupil roles if they are clearly defined, but inviting a dual relationship confuses him and he cannot define his own role. Many of these children do not feel secure at home, look for security at school, and feel betrayed by subtleties or gross inconsistencies in our behavior.

Sometimes the teacher seems to have made insufficient preparation for the daily lesson. Then these pupils feel that the teacher is not especially interested in the subject matter and that, in effect, he is saying, "This material really isn't that important." Often a teacher may foster this feeling by spending class time telling about his personal activities, hobbies or interests. These students need a positive example. If they think the teacher lacks interest they use this as a reason for their own indifference.

Many of these students feel that we, as teachers or counselors, are unable or unwilling to help with personal problems. We sometimes seem to be self-centered and lacking in sensitivity. They feel that we are too ready to place them in a category and react to the category rather than to the individual. They feel we tend to treat children in terms of their past reputations rather than for their present acts or deeds. How often do we, when these students do try to learn and behave, misinterpret their questions or actions or distrust their motives?

Sometimes it seems true that "when these children want love the most, they act the worst." Often they begin by unwittingly behaving in ways that anger the teacher, and as a result, they feel they are unjustly punished. Then they must reciprocate to save face. One way is in becoming masters in the art of finding weaknesses in the personality characteristics of others. They are quick to discover ways of irritating and taking revenge and they use these.

These children very much want the staff at school to respect them as individuals. They want to go to teachers and counselors for help but are; afraid their motives will be misunderstood or their confidence betrayed. Their approach to faculty members generally is ambivalent. They recognize their need for help but are fearful, suspicious and ready to flare up in hostility. If they could overcome their distrust there is more chance that they would go to teachers and counselors for the help they really want so badly.

Feelings about Themselves

These pupils have given, through their expression in the group counseling atmosphere, some picture of their perceptions of themselves. It seems clear that they have very poor self-concepts of their intellectual abilities. For example, in spite of the counselor's attempts to take advantage of every opportunity to build up their ideas of themselves as persons with capacity, they cannot believe it possible they are not "dumb. When they generalize their feelings of inadequacy, thinking that others look at them as incapable of learning, they come to see themselves as hopeless. Their need to succeed is so intense that it brings about a great fear of failure. When one fears failure so much, it is easier to accept being called "lazy" or to accept one's self as being incapable, than it is to attempt to do work and take the chance of failing at it. To make a real effort and thus risk failure is too great a threat, too great a burden on one's already depleted self-esteem.

As a result of feeling rejected by authority figures, these pupils see themselves as objects of scorn and hostility. They come to believe they are not worth much as people. It seems everyone is showing them how bad and hopeless they are. Their own inability to cope with authority reinforces their feelings of inadequacy and, like a vicious circle, decreases their ability to accept authority. Because of their low self-esteem, these pupils feel they must fight authority in order to survive. Otherwise they will be beaten down and will become smaller and smaller.

Sometimes we are misled by the show of bravado these pupils make; we think they are leaders of a troublesome clique or a group in class.

Sometimes they are, but as a matter of fact in their own eyes they lack status. For example, they often use profanity and obscenities in an effort to convince themselves, as well as others, of their own status and maturity. We all have a strong need to be treated as persons of dignity and personal worth; because these pupils have such negative feelings toward themselves their need for such treatment is even greater. They are very easily embarrassed and tend to interpret relatively innocuous comments as attacks upon their innermost selves. They are so sure they are going to be hurt that they __are__ hurt.

This lack of status is felt in the social area as well. These pupils feel left out, they feel rejected by the majority of their peers, as well as by adults. Many times in our counseling groups the pupils have said that they did not really like their friends, but felt forced into these associations by being rejected by others.

__Feelings about Parents and Other Adults__

These children want very much to be accepted and understood by their parents, but they feel in many cases that their parents do not care about them. Moreover their feeling of being rejected by parents increases their expectation of rejection by others.

Often these pupils do not have the skills needed to bring about a closer relationship with their parents. Their poor ability to verbalize seems to prevent them from taking constructive action. They want to talk to their parents but lack communication skills, as well as social and other skills that enhance interpersonal relationships. The pupils often feel their parents do not want to spend time with them. One boy, for example, said his father was more interested in reading the newspaper than in him. There was no concern that his father may have just returned from work and perhaps needed some quiet or relaxation. The boy could perceive only that his father was rejecting him. Underachieving, acting-out pupils expect to be rejected and see the behavior of others as rejection, however unrelated this perception may be to reality as we see it. In the counseling group these children centered upon their own feelings and had difficulty in trying to understand the feelings their parents may have had.

These children want to be accepted as persons who try and care, but they are unable to cope with their feeling unwanted and misunderstood. They find it hard to see that change in their own behavior might improve the situation. Yet these children cry out to have their feelings and attitudes respected and accepted by others.

In spite of their wish for parental understanding these children often tend to avoid home. This reaction, of course, increases the distance between them and their parents and makes communication more difficult, compounding their feelings of rejection and helplessness. Although much of this feeling is the result of distorted perception, in some instances they really have been badly treated. Extremes do actually occur - such as their being put out of the house or locked out as the result of the parents' exasperation with their behavior. When this happens the cycle of misunderstanding has completely destroyed communication between parent and child.

These children are not altogether negative in their feelings toward adults, although even the positive feelings they express are tainted by distrust and disappointment. They look to adults for leadership; they feel that adults, especially parents and teachers, should present a good example for them. They make many statements which show how distraught and confused they are by profanity, roughness and emotional outbursts at home or school. They look for examples of action, wanting to be shown rather than told. We have heard them talk about qualities they admire in adults as well as their complaints. They also discuss with each other those people whom they use as adult models. They do tend, however, to see the world mostly in terms of black and white and show disappointment when the adult world is not "perfect." They seem to feel that an adult is either "all for" or "all against" them. Such narrowness of perception makes the world a very difficult place. One cannot help letting these children down in one way or another; they are so demanding of us.

These children feel they have no socially acceptable recourse when we frustrate or "fail" them. They retaliate against adults by getting poor grades, being disruptive in class, withdrawing from the home or school, smoking, wearing freakish clothes and other such devices. This is more than a passive resistance; these are acts of revenge. Students have recognized this themselves in the counseling sessions, expressing it in such ways as, "If that is the way they are going to treat me, I'll show them - I'll fail," or "They want me to go to college, but I'll fix them - I won't study." In the groups these pupils showed understanding of some of their acting-out behavior as a weapon to be used against adults.

On the whole, these underachieving acting-out students appear to be very sensitive individuals. They present the normal emotional needs of adolescents and are especially sensitive when these needs are not met. They are lonely individuals who feel the whole world is against them. Because they have been so unsuccessful in their efforts to gain acceptance and understanding, they resort to revenge and attention-getting behavior. If they are hated - at least this is holding the attention of their peers and adults and gives them some status. Their concept of themselves is very poor and they use every method they can think of to maintain some integrity of self. Basically, these children are not atypical but rather quite normal in their personality needs. We can recognize the exaggerated form of their needs as basic to every individual. These children are, in every way they know how, asking for, begging for understanding and acceptance as worthwhile human beings.

Conclusion

There are several implications in these observations which are applicable to ourselves. We need to do all in our power to become even more sensitive as professional persons than we are now. We need to look behind overt behavior to seek deeper meanings. It may be helpful if we ask ourselves, "But what is this boy really saying? What is he really asking for?"

If we are able to see beyond the facade that is so frequently presented to us we become better able to apply our knowledge and understanding of human behavior. Thus, as we understand these pupils as they really are, we can more readily use our professional techniques toward meeting some of their needs.

More specifically, if we realize that much of the aggression they display is not really aimed at us personally, but rather at people in authority in general, we are more likely to react in a positive, accepting, constructive manner. If we accept these pupils and truly feel they want to improve, we will be better able to convey our warm feelings to them; then we will be more likely to strike a responsive chord.

In our own efforts to become better educators we should continue to try to be consistent with all pupils and to clarify realistic expectations. If we treat each pupil as a worthwhile individual whom we respect, each will try to respond in kind. As we seek understanding of the behavior of pupils, so also should we question ourselves. A little soul-searching on our own part may save much unpleasantness and keep us from reacting to symptoms rather than to needs.

Perhaps two questions might serve as guides as we attempt to aid these pupils in developing into constructive, more successful school citizens. We might continually ask ourselves, "How will this make him feel?" Or, perhaps, when we are about to say or do something which will affect the child, we should ask ourselves, "How will this help this child?"

APPENDIX E

Student' name ______________________

PARENT QUESTIONNAIRE

Please indicate any changes you may have noticed in your son by placing a check in the right box:

How does he get along with:	Very Much Better	Much Better	Slightly Better	Same	Slightly Worse	Much Worse	Very Much Worse
1. his father							
2. his mother							
3. his brother(s)							
4. his sister(s)							
5. his teachers							
6. other adults							
7. boys other than his brothers							
8. girls other than his sisters							
9. in school							
What is your feeling about:							
1. his self-confidence							
2. studying on his own							
3. doing his chores							
4. doing what he is told							
5. his talking more							
6. generally keeping out of trouble							

Please describe below or on the back any changes in your son's attitudes that you might have noticed over the past school year. Feel free to write in any other comment that might help us.

To Parents of Control Group Appendix E

BOARD OF COOPERATIVE EDUCATIONAL SERVICES
546 North Bedford Road, Bedford Hills, New York

GROUP COUNSELING PROJECT

Noble J. Gividen, Ed. D.
Superintendent

C. C. Dunsmoor, Ed. D.
Director of the Project

Benjamin Cohn, Ed. D.
Chief Investigator:

Co-Investigators:
Charles F. Combs
Edward J. Gibian
A. Mead Sniffen

July 5, 1962

Dear Parents:

During the last semester of the past school year we have been studying boys who do not seem to be doing as well as they could. Your son seems to have much more ability than he is using in school.

In order to help us be of more assistance to such students in the future, we are asking your cooperation in filling out the enclosed questionnaire. Of course, boys vary from day to day, so please try to give a general picture of any changes you may have noticed from January to the close of school.

A self-addressed envelope is enclosed for your convenience. Your cooperation will be of great value in assisting us to help other children.

Very truly yours,

To Parents of Experimental Group Appendix E

BOARD OF COOPERATIVE EDUCATIONAL SERVICES
546 North Bedford Road, Bedford Hills, New York

GROUP COUNSELING PROJECT

Noble J. Gividen, Ed. D.
Superintendent

C. C. Dunsmoor, Ed. D.
Director of the Project

Benjamin Cohn, Ed. D.
Chief Investigator

Co-Investigators:
Charles F. Combs
Edward J. Gibian
A. Mead Sniffen

July 5, 1962

Dear Parents:

As you undoubtedly remember, your son participated in a Group Counseling Project during the last semester of this past year. He was selected because he seemed to have much more ability than he was using in school

In order to evaluate the project and to help us to be of more assistance to such students in the future, we are asking your cooperation in filling out the enclosed questionnaire. Of course, boys vary from day to day, so please try to give a general picture of any changes that you may have noticed from January to the close of school.

A self-addressed envelope is enclosed for your convenience. Your cooperation will be of great value in assisting us to help other children.

Very truly yours,

To All Parents

Appendix E

BOARD OF COOPERATIVE EDUCATIONAL SERVICES
546 North Bedford Road, Bedford Hills, New York

GROUP COUNSELING PROJECT

Noble J. Gividen, Ed. D.
Superintendent

C. C. Dunsmoor, Ed. D.
Director of the Project

Benjamin Cohn, Ed. D.
Principal Investigator
Co-Investigators:
Charles F. Combs, Ed. D.
Edward J. Gilbien
A. Mead Sniffen, Ph. D.

April, 1963

Dear

As you may recall, last summer we sent you a questionnaire about your son . The returns from this survey have been of great value to us in our work to help students such as your boy to achieve up to their best ability.

We would now like to ask your further assistance in evaluating our work. We are enclosing another questionnaire, and would very much appreciate it if you would fill it in, thinking of your son over the past school year, and if and how he may have changed.

A self-addressed envelope is enclosed for your convenience. We hope you will be able to complete this and return it to us by April 22.

We are very grateful for your cooperation.

Sincerely,

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Appendix E

BOARD OF COOPERATIVE EDUCATIONAL SERVICES
546 North Bedford Road, Bedford Hills, New York

GROUP COUNSELING PROJECT

Noble J. Gividen, Ed. D.
Superintendent

C. C. Dunsmoor, Ed. D.
Director of the Project

Benjamin Cohn, Ed. D.
Principal Investigator
Co-Investigators:
Charles F. Combs
Edward J. Gibian
A. Mead Sniffen

Last month we sent you a questionnaire in regard to your son . In case this was lost in the mail, we are sending you a duplicate. We would appreciate your filling this out and returning it as soon as possible. A stamped self-addressed envelope is enclosed for your convenience.

If you have any questions, please feel free to call us at MOunt Kisco 6-9568. Thank you for your cooperation.

Sincerely,

Lynne Bryant
Secretary
Group Counseling Project

Appendix E

BOARD OF COOPERATIVE EDUCATIONAL SERVICES
546 North Bedford Road, Bedford Hills, New York

GROUP COUNSELING PROJECT

Noble J. Gividen, Ed.D.
Superintendent

C. C. Dunsmoor, Ed.D.
Director of the Project

Benjamin Cohn, Ed. D.
Principal Investigator
Co-Investigators:
Charles C. Combs, Ed.D.
Edward J. Gibian
A. Mead Suiffen, Ph.D.

May 29, 1963

Dear

In April we sent you a questionnaire about your son which may not have reached you. We are enclosing another questionnaire and would appreciate it if you would fill this in, thinking of your son over the past school year, and if and how he may have changed.

From these questionnaires we are trying to learn more about ways in which we might help students to improve in their school work. The results of this survey are treated anonymously, that is, we intend to gain general information about boys, rather than to use specific information about one child. The results of last year's survey have been of great help to us in our work to help students and we would like to ask your further assistance in evaluating our efforts.

A self-addressed envelope is enclosed for your convenience. We hope you will be able to complete this and return it to us as soon as possible.

We are very grateful for your cooperation.

Sincerely,

Ben Cohn

Benjamin Cohn, Ed.D.

Enc.

APPENDIX F

STUDENT PERSONAL RATING SHEET **GROUP COUNSELING PROJECT**

Student______________________ Teacher____________________ Subject________ Date______

Please place a check mark above the point on the scale which best describes the student as you see him now. Your mark may be between the vertical lines. We would also appreciate any personal observations you might write on the other side of this sheet.

1. MOTIVATION	Purposeless	Vacillating	Usually purposeful	Effectively motivated	Highly motivated
2. INFLUENCE & LEADERSHIP	Negative	Cooperative but retiring	Sometimes in minor affairs	Contributing in important affairs	Judgment respected--makes things go
3. CONCERN FOR OTHERS	Indifferent	Self-centered	Somewhat socially concerned	Generally concerned	Deeply and actively concerned
4. RESPONSIBILITY	Unreliable	Somewhat dependable	Usually dependable	Conscientious	Assumes much responsibility
5. EMOTIONAL STABILITY	Hyperemotional Apathetic	Excitable Unresponsive	Usually well-balanced	Well-balanced	Very stable
6. INTELLECTUAL CAPACITY	Dull, slow	Limited	Sensible	Alert	Critical, clearheaded.
7. PERSONAL APPEARANCE	Undesirable	Careless	Acceptable	Favorable	Attractive
8. INTEGRITY	Not dependable	Questionable at times	Generally honest	Reliable, dependable	Constantly trustworthy
9. INDUSTRY	Seldom works even under pressure	Needs constant pressure	Needs occasional prodding	Prepares assigned work regularly	Seeks additional work

CHECK ONE: I have made a written statement on the other side ______.

This side completes my summation of the student ______.

Appendix F

BOARD OF COOPERATIVE EDUCATIONAL SERVICES
First Supervisory District,Westchester County
Bedford Hills, New York

GROUP COUNSELING PROJECT
C. C. Dunsmoor, Ed.D., Director
Benjamin Cohn, Ed.D., Chief Investigator

March 20, 1962

Dear Junior High School Teacher:

During the past few weeks we have received many informal comments pertaining to the Group Counseling Project. Many of these comments have been favorable and constructive.

In an effort to quantify these remarks and make the most effective use of them, we would appreciate it if you would take a few minutes to indicate any positive or negative evidences that might be attributed to the Project. Feel free to describe and evaluate any incidents you may have noticed, and include your feelings about the Project if you wish.

Thank you,

Project Staff

P.S.: Please use the bottom and back of this paper if you like, and return it to your principal or guidance counselor.

Appendix F

BOARD OF COOPERATIVE EDUCATIONAL SERVICES
546 North Bedford Road, Bedford Hills, New York

April, 1963

Dear Teacher:

During 1961-62, your school participated in a Federally-sponsored project designed to help students achieve better in school. Below is a list of boys who were involved in this project. We would appreciate your help in evaluating any of these boys whom you have had this year in your classes. Please use one of the enclosed rating sheets for each boy. When you have finished rating all the boys you have, please clip all the sheets together and return them to the Guidance Office, along with any extra blank sheets.

Thank you very much for your cooperation with the project staff.

Sincerely,

Ben Cohn

Benjamin Cohn, Ed.D.
Principal Investigator